



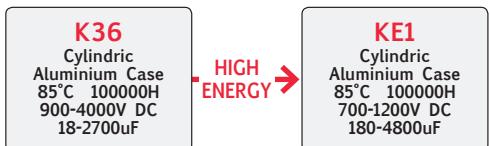
# Kendell™

FILM  
CAPACITORS



# POWER FILM CAPACITORS ROADMAP

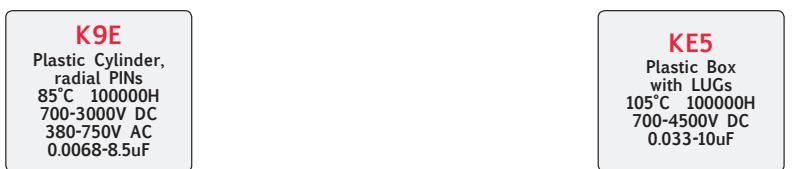
## DC-LINK FILM CAPACITORS 85°C



105°C



## SNUBBER FILM CAPACITORS 85°C



## AC-FILTER FILM CAPACITORS 85°C



105°C

105°C

# GLOSSARY

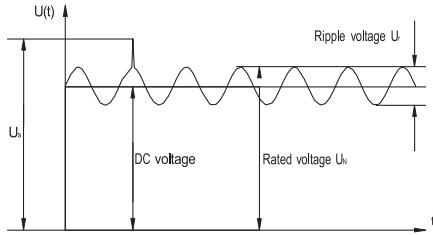
## 1. Technical Terms and Definitions

### 1.1 Rated Capacitance $C_n$

The rated capacitance measured at  $20\pm 5^\circ\text{C}$ , 100Hz.

### 1.2 Rated Voltage $U_n$

The maximum or peak voltage of either polarity of non-reversing type wave form for which the capacitor has been designed and rated.



### 1.3 Non-Repetitive Peak (non-recurrent surge) Voltage $U_s$

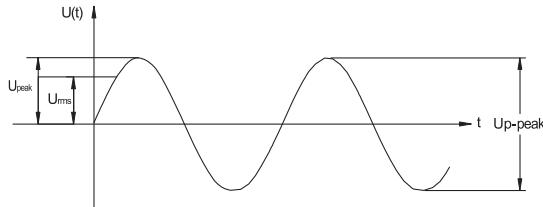
Voltages beyond the rated voltage induced by switching or faults of the system or any part of it. Maximum count 1000 times with the duration of not more than 50 ms each.

### 1.4 Ripple Voltage $U_r$

The peak-to-peak alternating component of the unidirectional voltage

### 1.5 Rated A.C Voltage $U_{rms}$

Root mean square of the max. permissible value of sinusoidal AC voltage in continuous operation



### 1.6 Rated A.C peak voltage $U_{peak}$

Rated A.C peak voltage, permissible A.C peak voltage in continuous operation.

### 1.7 Voltage Rise Time $du/dt$

This value shows the maximum voltage rise or fall time, it is expressed in volts per microsecond, and cannot overcome.

### 1.8 Maximum non-repetitive rate of voltage rise ( $du/dt$ )s

Peak rate of voltage rise that may occur non-repetitively and briefly in the event of a fault.

### 1.9 Voltage Test between terminals $U_{t-t}$

Routine test of all capacitors conducted at room temperature, prior to delivery. A further test with 80% of the test voltage stated in the data sheet may be carried out once at the user's location.

### 1.10 Voltage Test between terminals and case $U_{t-c}$

Routine test of all capacitors between short-circuited terminals and case, conducted at room temperature. May be repeated at the user's location.

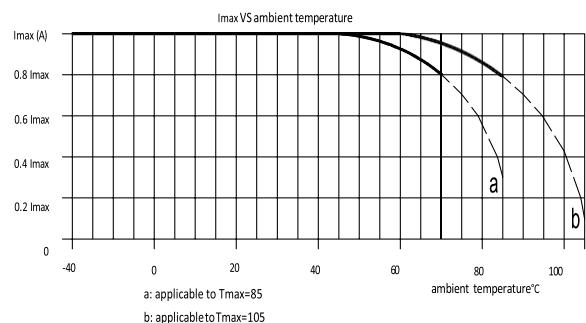
### 1.11 Peak Current $I_{peak}$

Maximum permitted repetitive current amplitude during continuous operation

$$I_{peak} = C_n \times (du/dt)$$

### 1.12 Maximum Current $I_{max}$

Maximum rms value of permissible current in continuous operation. The values given in the data sheets are related to either the specified maximum power dissipation or the current limits of the connection terminals



### 1.13 Non-repetitive Peak Current (surge) $I_s$

Maximum current that may occur non-repetitively and briefly in the event of a fault. Maximum count 1000 times with the duration of not more than 50 ms each.

$$I_s = C_n \times (du/dt)s$$

### 1.14 Equivalent Series Resistance $ESR$

Equivalent resistance representing the sum of all Ohmic resistances occurring inside the capacitor. Essential for calculation of the current dependent losses.

### 1.15 Self-inductance $L_s$

Represents the sum of all inductive elements which are, for mechanical and construction reasons, contained in any capacitor.

### 1.16 Insulation Resistance $I.R.$

The insulation resistance between terminals is expressed by meaning of the discharge time constant  $R.C$ . Measured for 1 minute at 100 Vdc and at  $25\pm 5^\circ\text{C}$ . The time constant (s) of a capacitor is the product of  $IR$  and capacitance:

$$s = M \times \mu F$$

### 1.17 Resonant Frequency $F_r$

The capacitance and self-inductance of any capacitor form a series resonant circuit. Above the resonant frequency, the inductive part of this LC-circuit prevails. The capacitor would then behave as an inductor.

$$F_r = \frac{1}{2\pi\sqrt{C_n \times L_s}}$$

### 1.18 Dielectric Dissipation Factor $\tan\delta$

Constant dissipation factor of the dielectric material for all capacitors in their rated frequency. The typic dielectric dissipation factor of BOPP is  $2 \times 10^{-4}$ .

### 1.19 Dissipation Factor $\tan\delta$

Dissipation factor calculated as:

$$\tan\delta = 2\pi f \times C_n \times ESR$$

### 1.20 Thermal Resistance $R_{th}$

The thermal resistance indicates by how many degrees the capacitor temperature at the hotspot rises in relation to the dissipation losses.

### 1.21 Maximum Power Dissipation $P_{max}$

Maximum permitted power dissipation for the capacitor's operation.

$$P_{max} = \frac{T_{hs} - T_e}{R_{th}}$$

## 1.22 Ambient Temperature $T_e$

Temperature of the surrounding air, measured 10 cm away and at 2/3 of the case height of the capacitor.

## 1.23 Hotspot Temperature $T_{hs}$

Temperature at hottest spot inside the capacitor

## 1.24 Lower Category Temperature $T_{min}$

Lowest permissible ambient temperature at which a capacitor may be used.

## 1.25 Upper Category Temperature $T_{max}$

Highest permissible capacitor temperature during operation, i.e. temperature at the hottest point of the case.

## 1.26 Rated Energy Contents $W_n$

Energy stored in the capacitor when charged at rated voltage.

$$W_n = \frac{1}{2} \times C_n \times U_n^2$$

## 1.27 Clearance in air $L$

The shortest distance between conducting parts of the terminals or between terminals and case.

## 1.28 Creepage distance $K$

The shortest distance along an insulated surface between conducting parts of the terminals or between terminals and case.

## 1.29 Altitude

The maximum allowable altitude is 2000 meters. As the barometric pressure decreases, the terminal arc-over susceptibility increases. Heat cannot be properly dissipated operating at high altitude and can result in high losses and eventual failure.

## 1.30 Storing Temperature

The range over which the capacitor can be stored without any applied voltage, with no degradation is -40 to +85 °C.

## 1.31 Life Expectancy $L_e$

Above all, the expected life of the capacitors depends on the internal temperature during operation, and the field strength in its dielectric.

Life expectancy versus voltage

$$L_e = L_n \times \left( \frac{U_n}{U_w} \right)^7$$

$L_e$  = Life expectancy at operating voltage (h)

$L_n$  = Life expectancy at nominal voltage (h)

$U_n$  = Nominal voltage (v)

$U_w$  = Operating voltage (v)

Life expectancy versus temperature

$$L_e = L_{T_0} \times 2^{\frac{(T_0 - T_{hs})}{11}}$$

$L_e$  = Life expectancy at  $\theta_{hs}$  hot spot temperature (h)

$L_{T_0}$  = Life expectancy at 70°C hot spot temperature (h)

$T_0$  = 70°C hot spot temperature (70°C)

$T_{hs}$  =  $\theta_{hs}$  Hot spot temperature (°C)

## 2. Mounting and Operating Instructions

### 2.1 Overpressure Disconnector

When mounting capacitors with overpressure disconnectors, make sure that the elastic elements of the fuse are not impeded. This means:

- The connecting leads must be sufficiently elastic.
- There must be enough space left for expansion above the terminals of aluminum-cased capacitors (stated for the individual type).
- The folded crimps must not be held by retaining clamps.
- The elastic bottom of capacitors in round steel cases must be free to move.

### 2.2 Mounting position

Capacitors can be mounted in any position except for some series that can only be mounted upright. But the following exceptions to the rule are possible:

- Capacitors in aluminum cases with voltage ratings up to 3600 V and capacitors in rectangular steel cases may also be positioned horizontally.
- At higher voltages or for capacitors in round steel cases, horizontal positioning is also permissible. But consult the manufacturer first.

### 2.3 Mounting

The threaded bolt on the bottom of aluminum cases with a diameter of  $\leq 60$  mm and a height of  $\leq 160$  mm may be used for attachment if vibration stress does not exceed 5 g. For larger dimensions and vibration of  $> 5$  g, the capacitors should be mounted by clamps, rings, etc.

Mounting with threaded bolt:

| Threaded bolt | Threaded bolt length | Maximum torque |
|---------------|----------------------|----------------|
| M8            | 10 mm                | 4.5 N.m        |
| M10           | 12 mm                | 6 N.m          |
| M12           | 16 mm                | 8 N.m          |

### 2.4 Terminals

For terminal bolt and nut tightening torques, refer to the individual datasheets. The terminal torque must not act upon the ceramic. The lead should be locked between two nuts.

| Female | Max Torque | Male | Max Torque |
|--------|------------|------|------------|
| M5     | 2.5 N.m    | M8   | 8.5 N.m    |
| M6     | 4.5 N.m    | M10  | 12 N.m     |
| M8     | 8.5 N.m    | M12  | 15 N.m     |

**2.4.1 Minimum terminal connection cross-sections in accordance with VDE/DIN 0100 part 523 and 430, group 2.** For the electrical terminals on ceramic lead-throughs only flexible leads should be used so that these lead-throughs are guarded against mechanical stress.

The outer leads of the capacitor should be dimensioned so that no heat is conducted into the component. You are advised to scale these leads so that heat is conducted away from capacitor terminals.

### 2.5 Grounding

Either a threaded bolt or a strap serves for grounding to VDE 0100. Grounding is omitted for single-pole and fully insulated capacitors. The layer of varnish beneath the clamp should be removed when grounding with a metal clamp.

## 2.6 Safety precautions

Observe appropriate safety precautions in use (self-recharging phenomena and the high energy contained in capacitors).

## 2.7 Solder conditions for radial and axial units on PCB

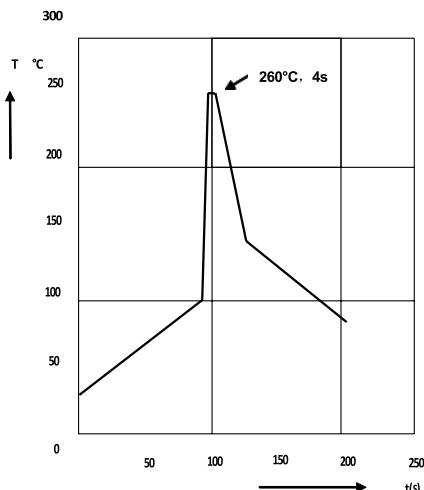
The soldering temperature must be set to keep the temperature inside the capacitors below the following general limits:

Solder bath temperature  $260 \pm 5^\circ\text{C}$ , Soldering time 4s for radial units with leads pitch  $P > 10\text{mm}$ .

When soldering the leads, make sure the capacitors are not damaged through excessive heat.

This means:

- Lead wires with a cross-section of  $> 1.5 \text{ mm}^2$  should not be soldered but clamped (soldering would require too much heat).
- Do not solder at spots where heat concentrates, otherwise there is a risk that the solder joint of the tags melts.



|                      |  |
|----------------------|--|
| Immersion depth      | 2.0 +0/-0.5mm from capacitor body or seating plane   |
| Shield               | Heat-absorbing board, $(1.5 \pm 0.5) \text{ mm}$ thick, between capacitor body and liquid solder |
| Evaluation criteria: |  |
| Visual inspection    | No visible damage  |
| $\Delta C/C_c$       | 2% for KE6/ KE2/ KE4/ KE9  |
| $\tan\delta$         | 5% for KE6/ KE2/ KE4/ KE9  |

## 3. End of use and disposal

The materials used in capacitors for power electronics from KENDEIL do not exceed the limits for chemical substances specified in the following national regulations:

- Chemicals prohibition regulation,
- CFC halogen prohibition regulation.

Our capacitors for power electronics contain no means of impregnation with PCB. Capacitors without PCB for power electronics are not explicitly mentioned in the waste qualification regulations. From this it could be deduced that they do not have to be disposed of as "waste requiring special supervision".

Because of our special commitment to and responsibility for the environment, we ask you to take every care when disposing of capacitors. We recommend that you drain the impregnation oil out of the capacitor and send it to an oil refuse depot. The emptied capacitor can then be disposed of as a grease and oil soiled item of apparatus. In any case it is advisable to consult a waste disposal facility and to find out about the applicable regulations in force.

## 4. Delivery and packing

In the packing of products, KENDEIL naturally supports the needs of protection of the environment.

In the words:

- Use of packing made of environmentally compatible materials.
- Reduction of packaging to the necessary minimum.
- We have implemented the following measures to ensure compliance with regulations governing the handling and disposal of commercial waste.
- Use of pallets.
- Securing of pallets by straps and edge guards of environment-friendly plastic (PE or PP). Stretch and shrink film (PE) are used.
- Shipping cartons are identified by the RESY symbol.
- Separating layers for pallets and cartons are primarily of paper or cardboard.
- Filler material consists of paper.
- Shipping cartons are sealed with recycled paper adhesive tape to ensure material of the same kind for disposal.
- We take our packaging back (especially product-specific packaging made of plastic). Nevertheless, we request our customers to deliver cardboard products, corrugated board, paper, etc. to recycling or disposal operators in order to avoid unnecessary transport of empty packaging.

## 5. Application

### 5.1 Capacitor for a DC-Link application

The rated voltage of the capacitor must be equal to or bigger than the applied DC voltage plus ripple voltage:

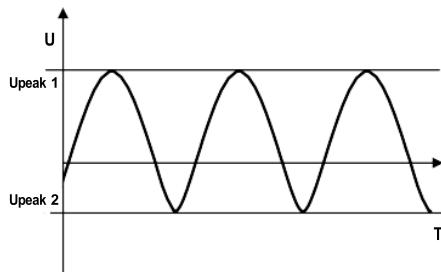
$$U_n = U_{dc} + \frac{U_r}{2}$$

According to the data sheets of values, you should find a capacitor with required capacitance  $C_n$  and voltage  $U_n$  is recommended. You must also verify that the maximum r.m.s. current for continuous operation can be accepted by the capacitor:  $I_{max}$  depends on the terminal or specified on the sheets.

These capacitors may be subjected to the following surge voltages without any significant reduction in lifetime expectancy.

| Repetitive surge voltage | Maximum duration               |
|--------------------------|--------------------------------|
| 1.1 x $U_n$              | 30% of the service period      |
| 1.15 x $U_n$             | 30 min/d                       |
| 1.2 x $U_n$              | 5 min/d                        |
| 1.3 x $U_n$              | 1 min/d                        |
| 1.5 x $U_n$              | 100 ms no more than 1000 times |

### 5.2 Capacitor for a AC application



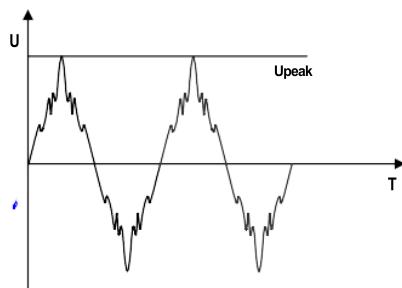
The rated voltage of the capacitor must be equal to or bigger than the higher one on the two  $U_{peak\ 1}$  and  $U_{peak\ 2}$ .

According to the data sheets of values, you should find a capacitor with required capacitance  $C_n$  and voltage  $U_n$  is recommended. You must also verify that the maximum r.m.s. current for continuous operation can be accepted by the capacitor:  $I_{max}$  depends on the terminal or specified on the sheets.

### 5.3 Capacitor for AC filter

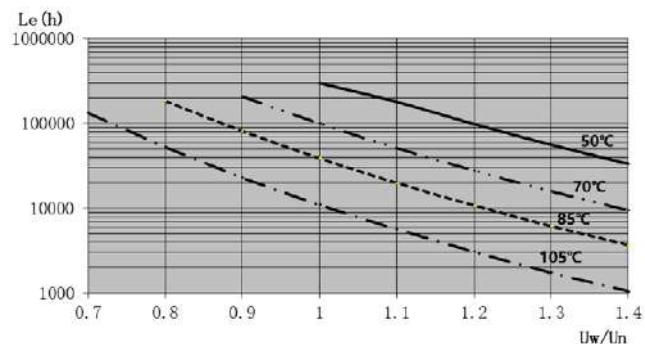
For AC filter capacitors, the AC voltage rating  $U_n$  AC is not determined by the rms value  $U_{rms}$ , but by the peak value of the resulting voltage (as measured by an oscilloscope or calculated from available harmonic data).

In any case, the rated voltage must be bigger than the applied peak voltage.



### 5.4 Operating life

The operating life of the capacitors depends on the internal temperature during operation, and the field strength in its dielectric. The capacitors have been designed for an average service life of 100,000h (permitted failure rate  $\leq 150\text{ppm}$ ). These values are rated for the hotspot temperatures specified in the selection charts. The following diagram demonstrates the correlation between service life, temperature, and operating voltage.



### 5.5 Lifetime Statements vs. Failure Rate

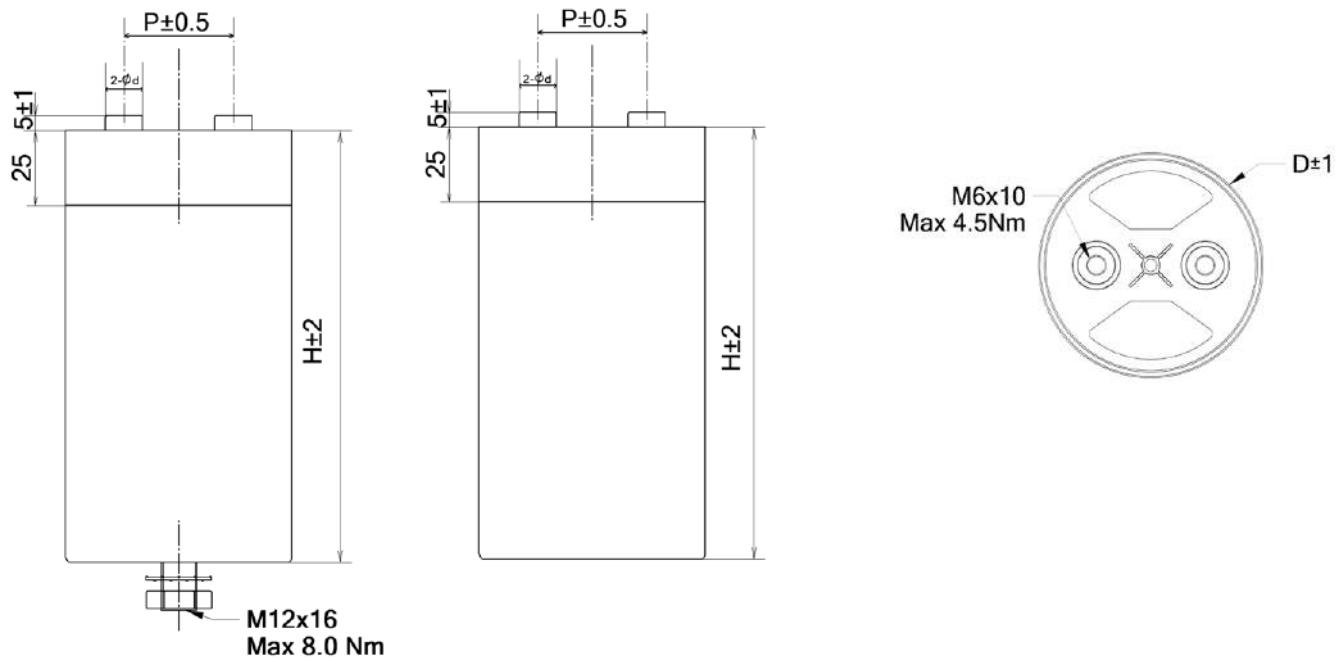
Statements on lifetime can become misleading as they may imply unreasonable assumptions; with clever derating of temperatures and operating voltages, one may create the illusion that a capacitor should last a million hours or more, while such statement would be purely theoretical and impossible to prove (even more so that most of the design features used in modern capacitors have not been in use for more than 20 years and would therefore not be backed up by any empirical references). Another problem with lifetime statements is that they do not inform about failures during the "rated" lifetime, and – in turn – may create the impression that after the expiration of the "rated" lifetime, the capacitor shall be exhausted, or fail. Any engineer will agree from own experience that in reality, there are components which may last much longer even under harder conditions, whilst others may fail prematurely.

### 5.6 Failure Modes

Plastic dielectric film capacitors can undergo two classic failure modes: open or shorts or high resistance shorts. In addition to these failures, capacitors may fail due to capacitance drift, instability with temperature, high dissipation factor or low insulation resistance. Failures can be the result of electrical, mechanical or environmental overstress, due to dielectric degradation during operation.

# K36 TYPE -40°C +85°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | Inverter, Motor drive, Switch power supply                                       |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type   |
| <b>Coating</b>                       | Cylinder aluminum case   |
| <b>Terminals</b>                     | Brass terminals (lead-free)  |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +85°C   |
| <b>Capacitance</b>                   | 18 to 2700µF   |
| <b>Rated Voltage</b>                 | 900 to 4000 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤3x10 <sup>-3</sup> Measured at 100 Hz and 20±5°C                                |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | Un≤1300V, 3KVAC (10s, 50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s, 50Hz)               |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## DISK DIMENSIONS

|              |            |           |           |
|--------------|------------|-----------|-----------|
| D= 76, 86 mm | D= 96 mm   | D= 116 mm | D= 136 mm |
| d= 12.5 mm   | d= 12.5 mm | d= 14 mm  | d= 14 mm  |
| P= 32 mm     | P= 45 mm   | P= 50 mm  | P= 50 mm  |

## K36 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 280       | 76x95       | 1,9           | 50       | 2240       | 4,6        | 41                      | K36900281_6K0K095                            |
| 380       | 86x95       | 1,8           | 50       | 3040       | 3,9        | 47                      | K36900381_6K0Q095                            |
| 390       | 76x120      | 2,1           | 60       | 2340       | 4,1        | 41                      | K36900391_6K0K120                            |
| 450       | 76x145      | 1,2           | 45       | 4500       | 3,7        | 58                      | K36900451_6K0K145                            |
| 520       | 86x120      | 1,9           | 60       | 3120       | 3,5        | 47                      | K36900521_6K0Q120                            |
| 570       | 76x175      | 1,3           | 50       | 4560       | 3,3        | 60                      | K36900571_6K0K175                            |
| 600       | 86x145      | 1,1           | 45       | 6000       | 3,2        | 64                      | K36900601_6K0Q145                            |
| 630       | 96x125      | 1,8           | 60       | 3780       | 3          | 53                      | K36900631_6K0R125                            |
| 700       | 116x100     | 1,6           | 50       | 5600       | 2,6        | 61                      | K36900701_6K0T100                            |
| 850       | 96x150      | 1,1           | 45       | 7300       | 2,7        | 70                      | K36900851_6K0R150                            |
| 750       | 86x175      | 1,2           | 50       | 6000       | 2,9        | 66                      | K36900751_6K0Q175                            |
| 780       | 76x225      | 1,4           | 60       | 4680       | 2,9        | 62                      | K36900781_6K0K225                            |
| 920       | 96x180      | 1,1           | 50       | 7360       | 2,5        | 73                      | K36900921_6K0R180                            |
| 1000      | 136x100     | 1,5           | 50       | 8000       | 2,1        | 70                      | K36900102_6K0U100                            |
| 1000      | 116x125     | 1,6           | 60       | 6000       | 2,3        | 63                      | K36900102_6K0T125                            |
| 1050      | 86x225      | 1,3           | 60       | 6300       | 2,5        | 69                      | K36900102_6K0Q225                            |
| 1050      | 116x150     | 1,1           | 45       | 10500      | 2,1        | 81                      | K36900102_6K0T150                            |
| 1200      | 96x230      | 1,2           | 60       | 7200       | 2,2        | 75                      | K36900122_6K0R230                            |
| 1300      | 136x125     | 1,6           | 60       | 7800       | 1,9        | 72                      | K36900132_6K0U125                            |
| 1450      | 116x180     | 1,1           | 50       | 11600      | 2          | 84                      | K36900142_6K0T180                            |
| 1500      | 136x150     | 1             | 45       | 26639      | 1,7        | 91                      | K36900152_6K0U150                            |
| 1900      | 136x180     | 1             | 50       | 15200      | 1,6        | 94                      | K36900192_6K0U180                            |
| 2000      | 116x230     | 1,1           | 60       | 12000      | 1,7        | 88                      | K36900202_6K0T230                            |
| 2700      | 136x230     | 1,1           | 60       | 16200      | 1,4        | 99                      | K36900272_6K0U230                            |

**RATED  
VOLTAGE  
900VDC**

## K36 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 180       | 76x95       | 2,1           | 50       | 1440       | 4,6        | 40                      | K36111181_6K0K095                            |
| 230       | 86x95       | 1,9           | 50       | 1840       | 3,9        | 45                      | K36111231_6K0Q095                            |
| 250       | 76x120      | 2,3           | 60       | 1500       | 4,1        | 40                      | K36111251_6K0K120                            |
| 280       | 76x145      | 1,3           | 45       | 2800       | 3,7        | 56                      | K36111281_6K0K145                            |
| 300       | 96x100      | 1,8           | 50       | 2400       | 3,3        | 51                      | K36111301_6K0R100                            |
| 330       | 86x120      | 2,1           | 60       | 1980       | 3,5        | 45                      | K36111331_6K0Q120                            |
| 350       | 76x175      | 1,4           | 50       | 2800       | 3,3        | 58                      | K36111351_6K0K175                            |
| 400       | 96x125      | 1,9           | 60       | 2400       | 3          | 51                      | K36111401_6K0R125                            |
| 400       | 86x145      | 1,2           | 45       | 4000       | 3,2        | 63                      | K36111401_6K0Q145                            |
| 420       | 86x136      | 2,1           | 60       | 1974       | 3,3        | 40                      | K36111421_6K0Q136                            |
| 450       | 116x100     | 1,6           | 50       | 3600       | 2,6        | 60                      | K36111451_6K0T100                            |
| 460       | 96x150      | 1,1           | 45       | 4600       | 2,7        | 69                      | K36111461_6K0R150                            |
| 480       | 76x225      | 1,5           | 60       | 2880       | 2,9        | 59                      | K36111481_6K0K225                            |
| 500       | 86x175      | 1,2           | 50       | 4000       | 2,9        | 65                      | K36111501_6K0Q175                            |
| 600       | 96x180      | 1,2           | 50       | 4800       | 2,5        | 71                      | K36111601_6K0R180                            |
| 630       | 136x100     | 1,5           | 50       | 5040       | 2,1        | 69                      | K36111631_6K0U100                            |
| 650       | 116x125     | 1,7           | 60       | 3900       | 2,3        | 62                      | K36111651_6K0T125                            |
| 680       | 86x225      | 1,3           | 60       | 4080       | 2,5        | 67                      | K36111681_6K0Q225                            |
| 730       | 116x150     | 1,1           | 45       | 7300       | 2,1        | 81                      | K36111731_6K0T150                            |
| 800       | 96x230      | 1,3           | 60       | 4800       | 2,2        | 74                      | K36111801_6K0R230                            |
| 900       | 136x125     | 1,6           | 60       | 5400       | 1,9        | 71                      | K36111901_6K0U125                            |
| 920       | 116x180     | 1,1           | 50       | 7360       | 2          | 83                      | K36111921_6K0T180                            |
| 1000      | 136x150     | 1             | 45       | 22433      | 1,7        | 91                      | K36111102_6K0U150                            |
| 1200      | 136x180     | 1,1           | 50       | 9600       | 1,6        | 93                      | K36111122_6K0U180                            |
| 1250      | 116x230     | 1,2           | 60       | 7500       | 1,7        | 87                      | K36111122_6K0T230                            |
| 1700      | 136x230     | 1,1           | 60       | 10200      | 1,4        | 98                      | K36111172_6K0U230                            |

**RATED  
VOLTAGE  
1100VDC**

## K36 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 150       | 76x95       | 2,1           | 50       | 1200       | 4,6        | 39                      | K36121151_6K0K095                            |
| 200       | 86x95       | 1,9           | 50       | 1600       | 3,9        | 45                      | K36121201_6K0Q095                            |
| 220       | 76x120      | 2,4           | 60       | 1320       | 4,1        | 39                      | K36121221_6K0K120                            |
| 240       | 76x145      | 1,3           | 45       | 2400       | 3,7        | 56                      | K36121241_6K0K145                            |
| 250       | 96x100      | 1,8           | 50       | 2000       | 3,3        | 50                      | K36121251_6K0R100                            |
| 270       | 86x120      | 2,1           | 60       | 1620       | 3,5        | 45                      | K36121271_6K0Q120                            |
| 300       | 76x175      | 1,4           | 50       | 2400       | 3,3        | 57                      | K36121301_6K0K175                            |
| 310       | 86x145      | 1,2           | 45       | 3100       | 3,2        | 63                      | K36121311_6K0Q145                            |
| 380       | 116x100     | 1,6           | 50       | 3040       | 2,6        | 60                      | K36121381_6K0T100                            |
| 380       | 96x150      | 1,2           | 45       | 3800       | 2,7        | 69                      | K36121381_6K0R150                            |
| 400       | 76x225      | 1,5           | 60       | 2400       | 2,9        | 59                      | K36121401_6K0K225                            |
| 420       | 86x175      | 1,3           | 50       | 3360       | 2,9        | 64                      | K36121421_6K0Q175                            |
| 470       | 86x225      | 1,4           | 60       | 2820       | 2,5        | 65                      | K36121471_6K0Q225                            |
| 500       | 116x125     | 1,8           | 60       | 3000       | 2,3        | 61                      | K36121501_6K0T125                            |
| 500       | 96x180      | 1,2           | 50       | 4000       | 2,5        | 71                      | K36121501_6K0R180                            |
| 550       | 116x150     | 1,1           | 45       | 5500       | 2,1        | 80                      | K36121551_6K0T150                            |
| 530       | 136x100     | 1,5           | 50       | 4240       | 2,1        | 69                      | K36121531_6K0U100                            |
| 560       | 86x225      | 1,4           | 60       | 3360       | 2,5        | 66                      | K36121561_6K0Q225                            |
| 680       | 96x230      | 1,3           | 60       | 4080       | 2,2        | 74                      | K36121681_6K0R230                            |
| 680       | 116x180     | 1,1           | 50       | 5440       | 2          | 82                      | K36121681_6K0T180                            |
| 730       | 136x125     | 1,6           | 60       | 4380       | 1,9        | 70                      | K36121731_6K0U125                            |
| 850       | 136x150     | 1             | 45       | 21848      | 1,7        | 91                      | K36121851_6K0U150                            |
| 950       | 136x180     | 1,1           | 50       | 7600       | 1,6        | 93                      | K36121951_6K0U180                            |
| 1000      | 116x230     | 1,2           | 60       | 6000       | 1,7        | 86                      | K36121102_6K0T230                            |
| 1200      | 136x230     | 1,1           | 60       | 7200       | 1,4        | 96                      | K36121122_6K0U230                            |

**RATED  
VOLTAGE  
1200VDC**

## K36 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 55        | 76x95       | 2,7           | 50       | 440        | 4,6        | 35                      | K36201550_6K0K095                            |
| 75        | 86x95       | 2,3           | 50       | 600        | 3,9        | 41                      | K36201750_6K0Q095                            |
| 75        | 76x120      | 3,2           | 60       | 450        | 4,1        | 34                      | K36201750_6K0K120                            |
| 85        | 76x145      | 1,5           | 45       | 850        | 3,7        | 51                      | K36201850_6K0K145                            |
| 90        | 96x100      | 2,2           | 50       | 720        | 3,3        | 46                      | K36201900_6K0R100                            |
| 100       | 86x120      | 2,7           | 60       | 600        | 3,5        | 40                      | K36201101_6K0Q120                            |
| 110       | 76x175      | 1,7           | 50       | 880        | 3,3        | 52                      | K36201111_6K0K175                            |
| 110       | 86x145      | 1,4           | 45       | 1100       | 3,2        | 58                      | K36201111_6K0Q145                            |
| 125       | 96x125      | 2,4           | 60       | 750        | 3          | 45                      | K36201121_6K0R125                            |
| 140       | 116x100     | 1,9           | 50       | 1120       | 2,6        | 56                      | K36201141_6K0T100                            |
| 140       | 96x150      | 1,3           | 45       | 1400       | 2,7        | 65                      | K36201141_6K0R150                            |
| 150       | 86x175      | 1,5           | 50       | 1200       | 2,9        | 60                      | K36201151_6K0Q175                            |
| 150       | 76x225      | 1,9           | 60       | 900        | 2,9        | 53                      | K36201151_6K0K225                            |
| 190       | 116x125     | 2             | 60       | 1140       | 2,3        | 56                      | K36201191_6K0T125                            |
| 190       | 96x180      | 1,4           | 50       | 1520       | 2,5        | 67                      | K36201191_6K0R180                            |
| 200       | 136x100     | 1,7           | 50       | 1600       | 2,1        | 66                      | K36201201_6K0U100                            |
| 200       | 86x225      | 1,7           | 60       | 1200       | 2,5        | 60                      | K36201201_6K0Q225                            |
| 220       | 116x150     | 1,2           | 45       | 2200       | 2,1        | 77                      | K36201221_6K0T150                            |
| 250       | 96x230      | 1,5           | 60       | 1500       | 2,2        | 68                      | K36201251_6K0R230                            |
| 275       | 136x125     | 1,8           | 60       | 1650       | 1,9        | 66                      | K36201271_6K0U125                            |
| 280       | 116x180     | 1,2           | 50       | 2240       | 2          | 79                      | K36201281_6K0T180                            |
| 310       | 136x150     | 1,1           | 45       | 12749      | 1,7        | 88                      | K36201311_6K0U150                            |
| 380       | 116x230     | 1,3           | 60       | 2280       | 1,7        | 81                      | K36201381_6K0T230                            |
| 400       | 136x180     | 1,1           | 50       | 3200       | 1,6        | 90                      | K36201401_6K0U180                            |
| 540       | 136x230     | 1,2           | 60       | 3240       | 1,4        | 93                      | K36201541_6K0U230                            |

RATED  
VOLTAGE  
2000VDC

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 35        | 76x145      | 3,8           | 45       | 350        | 3,7        | 33                      | K36301350_6K0K145                            |
| 39        | 76x175      | 4,6           | 50       | 312        | 3,3        | 31                      | K36301390_6K0K175                            |
| 47        | 86x145      | 3,4           | 45       | 470        | 3,2        | 37                      | K36301470_6K0Q145                            |
| 60        | 96x150      | 3,1           | 45       | 600        | 2,7        | 42                      | K36301600_6K0R150                            |
| 60        | 86x175      | 3,7           | 50       | 480        | 2,9        | 38                      | K36301600_6K0Q175                            |
| 60        | 76x225      | 5             | 60       | 360        | 2,9        | 32                      | K36301600_6K0K225                            |
| 75        | 96x180      | 3,4           | 50       | 600        | 2,5        | 42                      | K36301750_6K0R180                            |
| 82        | 86x225      | 4,2           | 60       | 492        | 2,5        | 38                      | K36301820_6K0Q225                            |
| 92        | 116x150     | 2,7           | 45       | 920        | 2,1        | 51                      | K36301920_6K0T150                            |
| 100       | 96x230      | 3,8           | 60       | 600        | 2,2        | 43                      | K36301101_6K0R230                            |
| 100       | 116x180     | 3             | 50       | 800        | 2          | 50                      | K36301101_6K0T180                            |
| 120       | 116x180     | 2,8           | 50       | 960        | 2          | 52                      | K36301121_6K0T180                            |
| 130       | 136x150     | 2,5           | 45       | 1300       | 1,7        | 59                      | K36301131_6K0U150                            |
| 150       | 116x230     | 3,2           | 60       | 900        | 1,7        | 52                      | K36301151_6K0T230                            |
| 160       | 136x180     | 2,6           | 50       | 1280       | 1,6        | 59                      | K36301161_6K0U180                            |
| 180       | 136x230     | 3             | 60       | 1080       | 1,4        | 59                      | K36301181_6K0U230                            |

RATED  
VOLTAGE  
3000VDC

## K36 TYPE STANDARD RATINGS

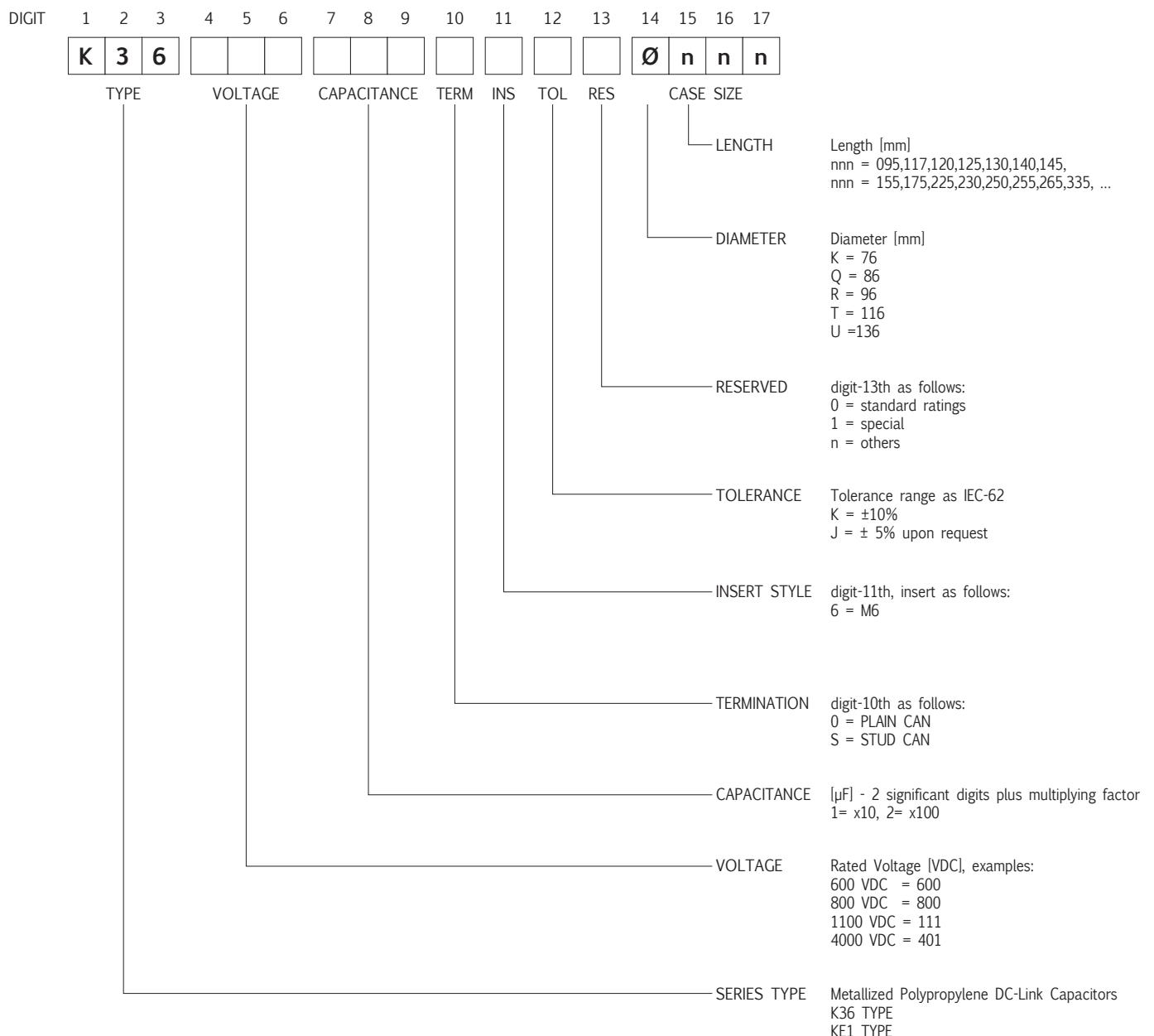
| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 22        | 76x145      | 4,2           | 45       | 220        | 3,7        | 31                      | K36361220_6K0K145                            |
| 28        | 76x175      | 4,8           | 50       | 224        | 3,3        | 31                      | K36361280_6K0K175                            |
| 30        | 86x145      | 3,6           | 45       | 300        | 3,2        | 36                      | K36361300_6K0Q145                            |
| 36        | 96x150      | 3,4           | 45       | 360        | 2,7        | 40                      | K36361360_6K0R150                            |
| 38        | 86x175      | 4,1           | 50       | 304        | 2,9        | 36                      | K36361380_6K0Q175                            |
| 38        | 76x225      | 5,7           | 60       | 228        | 2,9        | 30                      | K36361380_6K0K225                            |
| 46        | 96x180      | 3,7           | 50       | 368        | 2,5        | 40                      | K36361460_6K0R180                            |
| 50        | 86x225      | 4,8           | 60       | 300        | 2,5        | 35                      | K36361500_6K0Q225                            |
| 55        | 116x150     | 2,9           | 45       | 550        | 2,1        | 49                      | K36361550_6K0T150                            |
| 62        | 96x230      | 4,3           | 60       | 886        | 2,2        | 40                      | K36361620_6K0R230                            |
| 70        | 116x180     | 3,1           | 50       | 1357       | 2,0        | 49                      | K36361700_6K0T180                            |
| 75        | 136x150     | 2,7           | 45       | 1851       | 1,7        | 57                      | K36361750_6K0U150                            |
| 88        | 116x230     | 3,6           | 60       | 1257       | 1,7        | 49                      | K36361880_6K0T230                            |
| 100       | 136x280     | 2,8           | 50       | 1939       | 1,6        | 58                      | K36361101_6K0U280                            |
| 125       | 136x230     | 3,1           | 60       | 1786       | 1,4        | 58                      | K36361121_6K0U230                            |

RATED  
VOLTAGE  
3600VDC

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 18        | 76x145      | 4,6           | 45       | 180        | 3,7        | 30                      | K36401180_6K0K145                            |
| 23        | 76x175      | 5,2           | 50       | 184        | 3,3        | 29                      | K36401230_6K0K175                            |
| 23        | 86x145      | 4             | 45       | 230        | 3,2        | 34                      | K36401230_6K0Q145                            |
| 30        | 96x150      | 3,5           | 45       | 300        | 2,7        | 39                      | K36401300_6K0R150                            |
| 30        | 86x175      | 4,4           | 50       | 240        | 2,9        | 34                      | K36401300_6K0Q175                            |
| 30        | 76x225      | 6,4           | 60       | 180        | 2,9        | 29                      | K36401300_6K0K225                            |
| 38        | 96x180      | 3,9           | 50       | 304        | 2,5        | 39                      | K36401380_6K0R180                            |
| 40        | 86x225      | 5,3           | 60       | 240        | 2,5        | 34                      | K36401400_6K0Q225                            |
| 45        | 116x150     | 3             | 45       | 450        | 2,1        | 48                      | K36401450_6K0T150                            |
| 50        | 96x230      | 4,6           | 60       | 300        | 2,2        | 39                      | K36401500_6K0R230                            |
| 55        | 116x180     | 3,3           | 50       | 440        | 2          | 48                      | K36401550_6K0T180                            |
| 65        | 136x150     | 2,7           | 45       | 650        | 1,7        | 56                      | K36401650_6K0U150                            |
| 70        | 116x230     | 3,9           | 60       | 420        | 1,7        | 47                      | K36401700_6K0T230                            |
| 82        | 136x180     | 2,9           | 50       | 656        | 1,6        | 57                      | K36401820_6K0U180                            |
| 100       | 136x230     | 3,3           | 60       | 600        | 1,4        | 56                      | K36401101_6K0U230                            |

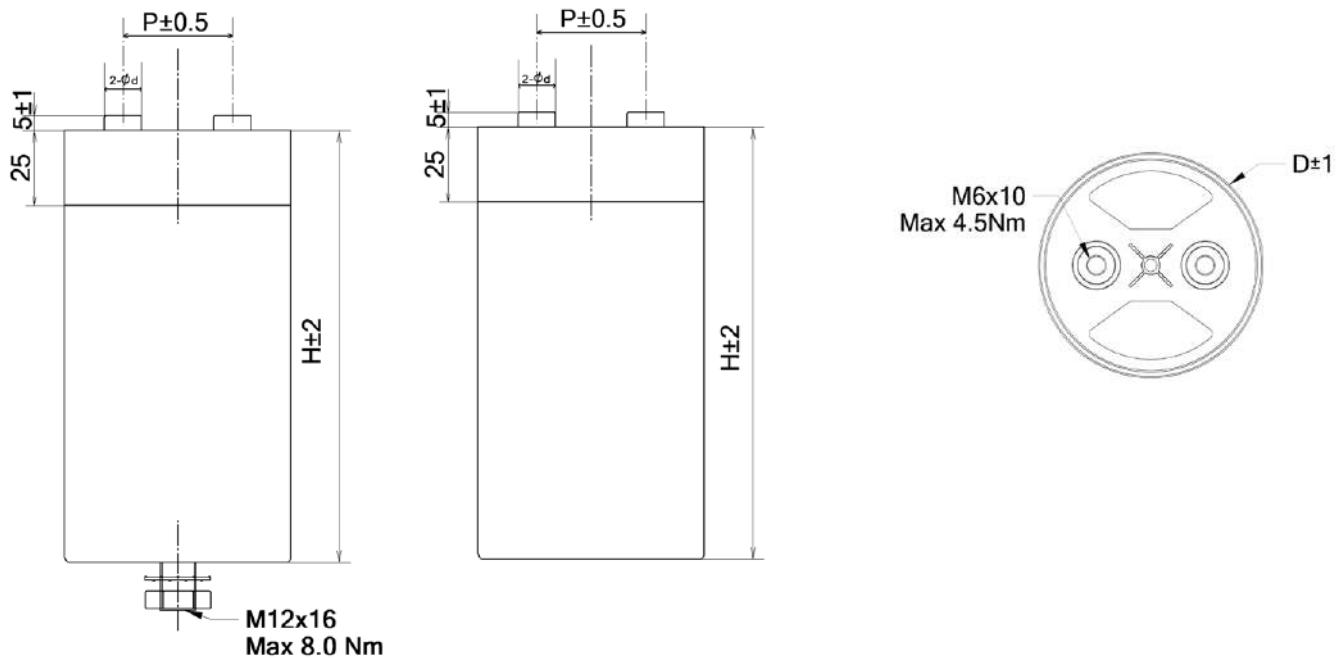
RATED  
VOLTAGE  
4000VDC

# PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS



# KE1 TYPE -40°C +85°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | Inverter, Motor drive, Switch power supply                                       |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type   |
| <b>Coating</b>                       | Cylinder aluminum case   |
| <b>Terminals</b>                     | Brass terminals (lead-free)  |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +85°C   |
| <b>Capacitance</b>                   | 180 to 4800μF  |
| <b>Rated Voltage</b>                 | 700 to 1200 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤3x10 <sup>-3</sup> Measured at 100 Hz and 20±5°C                                |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | Un≤1300V, 3KVAC (10s, 50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s, 50Hz)               |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## DISK DIMENSIONS

|             |            |           |           |
|-------------|------------|-----------|-----------|
| D= 76,86 mm | D= 96 mm   | D= 116 mm | D= 136 mm |
| d= 12.5 mm  | d= 12.5 mm | d= 14 mm  | d= 14 mm  |
| P= 32 mm    | P= 45 mm   | P= 50 mm  | P= 50 mm  |

## KE1 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 500       | 76x95       | 1,8           | ≤50      | 1652       | 4,6        | 43                      | KE1700501_6K0K095                            |
| 680       | 86x95       | 1,6           | ≤50      | 2247       | 3,9        | 48                      | KE1700681_6K0Q095                            |
| 700       | 76x120      | 1,9           | ≤60      | 1705       | 4,1        | 44                      | KE1700701_6K0K125                            |
| 800       | 76x145      | 1,1           | ≤45      | 3365       | 3,7        | 60                      | KE1700801_6K0K145                            |
| 845       | 96x100      | 1,6           | ≤50      | 2793       | 3,3        | 54                      | KE1700841_6K0R100                            |
| 900       | 86x120      | 1,8           | ≤60      | 2192       | 3,5        | 49                      | KE1700901_6K0Q120                            |
| 1000      | 76x175      | 1,2           | ≤50      | 3305       | 3,3        | 62                      | KE1700102_6K0K175                            |
| 1050      | 86x145      | 1,1           | ≤45      | 4416       | 3,2        | 66                      | KE1700102_6K0Q145                            |
| 1100      | 96x125      | 1,7           | ≤60      | 2679       | 3,0        | 55                      | KE1700112_6K0R125                            |
| 1200      | 116x100     | 1,5           | ≤50      | 3966       | 2,6        | 60                      | KE1700122_6K0T100                            |
| 1300      | 96x150      | 1,1           | ≤45      | 5468       | 2,7        | 72                      | KE1700132_6K0R150                            |
| 1300      | 86x175      | 1,1           | ≤50      | 4296       | 2,9        | 68                      | KE1700132_6K0Q175                            |
| 1300      | 76x225      | 1,3           | ≤60      | 3166       | 2,9        | 64                      | KE1700132_6K0K225                            |
| 1600      | 96x180      | 1,1           | ≤50      | 5288       | 2,5        | 74                      | KE1700162_6K0R180                            |
| 1600      | 116x125     | 1,6           | ≤60      | 3896       | 2,3        | 60                      | KE1700162_6K0T125                            |
| 1700      | 136x100     | 1,4           | ≤50      | 5618       | 2,1        | 60                      | KE1700172_6K0U100                            |
| 1700      | 86x225      | 1,2           | ≤60      | 4140       | 2,5        | 71                      | KE1700172_6K0Q225                            |
| 1900      | 116x150     | 1,0           | ≤45      | 7992       | 2,1        | 82                      | KE1700192_6K0T150                            |
| 2200      | 96x230      | 1,1           | ≤60      | 5357       | 2,2        | 78                      | KE1700222_6K0R230                            |
| 2400      | 136x125     | 1,5           | ≤60      | 5844       | 1,9        | 60                      | KE1700242_6K0U125                            |
| 2400      | 116x180     | 1,0           | ≤50      | 7932       | 2,0        | 85                      | KE1700242_6K0T180                            |
| 2800      | 136x150     | 1,0           | ≤45      | 11777      | 1,7        | 93                      | KE1700282_6K0U150                            |
| 3300      | 116x230     | 1,1           | ≤60      | 8036       | 1,7        | 90                      | KE1700332_6K0T230                            |
| 3500      | 136x180     | 1,0           | ≤50      | 11567      | 1,6        | 96                      | KE1700352_6K0U180                            |
| 4800      | 136x230     | 1,0           | ≤60      | 11689      | 1,4        | 100                     | KE1700482_6K0U230                            |

**RATED  
VOLTAGE  
700VDC**

## KE1 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 370       | 76x95       | 1,8           | ≤50      | 1427       | 4,6        | 42                      | KE1800371_6K0K095                            |
| 490       | 86x95       | 1,7           | ≤50      | 1889       | 3,9        | 48                      | KE1800491_6K0Q095                            |
| 500       | 76x120      | 2,0           | ≤60      | 1420       | 4,1        | 43                      | KE1800501_6K0K120                            |
| 580       | 76x145      | 1,2           | ≤45      | 2846       | 3,7        | 59                      | KE1800581_6K0K145                            |
| 600       | 96x100      | 1,6           | ≤50      | 2313       | 3,3        | 53                      | KE1800601_6K0R100                            |
| 680       | 86x120      | 1,8           | ≤60      | 1932       | 3,5        | 49                      | KE1800681_6K0Q120                            |
| 700       | 76x175      | 1,2           | ≤50      | 2699       | 3,3        | 60                      | KE1800701_6K0K175                            |
| 750       | 86x145      | 1,1           | ≤45      | 3680       | 3,2        | 65                      | KE1800751_6K0Q145                            |
| 820       | 96x125      | 1,7           | ≤60      | 2330       | 3,0        | 54                      | KE1800821_6K0R125                            |
| 900       | 116x100     | 1,5           | ≤50      | 3470       | 2,6        | 60                      | KE1800901_6K0T100                            |
| 900       | 96x150      | 1,1           | ≤45      | 4416       | 2,7        | 71                      | KE1800901_6K0R150                            |
| 950       | 86x175      | 1,2           | ≤50      | 3663       | 2,9        | 67                      | KE1800951_6K0Q175                            |
| 1000      | 76x225      | 1,3           | ≤60      | 2841       | 2,9        | 63                      | KE1800102_6K0K225                            |
| 1200      | 96x180      | 1,1           | ≤50      | 4627       | 2,5        | 74                      | KE1800122_6K0R180                            |
| 1200      | 116x125     | 1,6           | ≤60      | 3409       | 2,3        | 63                      | KE1800122_6K0T125                            |
| 1300      | 136x100     | 1,5           | ≤50      | 5012       | 2,1        | 60                      | KE1800132_6K0U100                            |
| 1300      | 86x225      | 1,2           | ≤60      | 3693       | 2,5        | 70                      | KE1800132_6K0Q225                            |
| 1400      | 116x150     | 1,0           | ≤45      | 6870       | 2,1        | 82                      | KE1800142_6K0T150                            |
| 1600      | 96x230      | 1,2           | ≤60      | 4546       | 2,2        | 77                      | KE1800162_6K0R230                            |
| 1700      | 136x125     | 1,5           | ≤60      | 4830       | 1,9        | 60                      | KE1800172_6K0U125                            |
| 1800      | 116x180     | 1,1           | ≤50      | 6940       | 2,0        | 85                      | KE1800182_6K0T180                            |
| 2000      | 136x150     | 1,0           | ≤45      | 9814       | 1,7        | 92                      | KE1800202_6K0U150                            |
| 2400      | 116x230     | 1,1           | ≤60      | 6818       | 1,7        | 89                      | KE1800242_6K0T230                            |
| 2500      | 136x180     | 1,0           | ≤50      | 9639       | 1,6        | 95                      | KE1800252_6K0U180                            |
| 3500      | 136x230     | 1,1           | ≤60      | 9943       | 1,4        | 100                     | KE1800352_6K0U230                            |

**RATED  
VOLTAGE  
800VDC**

## KE1 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 220       | 76x95       | 2,0           | ≤50      | 1042       | 4,6        | 40                      | KE1111221_6K0K095                            |
| 300       | 86x95       | 1,8           | ≤50      | 1421       | 3,9        | 46                      | KE1111301_6K0Q095                            |
| 300       | 76x120      | 2,3           | ≤60      | 1047       | 4,1        | 40                      | KE1111301_6K0K120                            |
| 345       | 76x145      | 1,2           | ≤45      | 2080       | 3,7        | 57                      | KE1111341_6K0K145                            |
| 360       | 96x100      | 1,7           | ≤50      | 1705       | 3,3        | 51                      | KE1111361_6K0R100                            |
| 400       | 86x120      | 2,0           | ≤60      | 1396       | 3,5        | 46                      | KE1111401_6K0Q120                            |
| 450       | 76x175      | 1,3           | ≤50      | 2132       | 3,3        | 59                      | KE1111451_6K0K175                            |
| 460       | 86x145      | 1,2           | ≤45      | 2773       | 3,2        | 63                      | KE1111461_6K0Q145                            |
| 490       | 96x125      | 1,9           | ≤60      | 1710       | 3,0        | 52                      | KE1111491_6K0R125                            |
| 550       | 96x150      | 1,1           | ≤45      | 3316       | 2,7        | 70                      | KE1111551_6K0R150                            |
| 550       | 116x100     | 1,6           | ≤50      | 2605       | 2,6        | 60                      | KE1111551_6K0T100                            |
| 600       | 86x175      | 1,2           | ≤50      | 2842       | 2,9        | 65                      | KE1111601_6K0Q175                            |
| 600       | 76x225      | 1,4           | ≤60      | 2094       | 2,9        | 60                      | KE1111601_6K0K225                            |
| 720       | 96x180      | 1,2           | ≤50      | 3411       | 2,5        | 72                      | KE1111721_6K0R180                            |
| 750       | 116x125     | 1,7           | ≤60      | 2618       | 2,3        | 60                      | KE1111751_6K0T125                            |
| 800       | 136x100     | 1,5           | ≤50      | 3790       | 2,1        | 60                      | KE1111801_6K0U100                            |
| 800       | 86x225      | 1,3           | ≤60      | 2792       | 2,5        | 68                      | KE1111801_6K0Q225                            |
| 850       | 116x150     | 1,1           | ≤45      | 5124       | 2,1        | 81                      | KE1111851_6K0T150                            |
| 980       | 96x230      | 1,2           | ≤60      | 3421       | 2,2        | 75                      | KE1111981_6K0R230                            |
| 1050      | 136x125     | 1,6           | ≤60      | 3665       | 1,9        | 60                      | KE1111102_6K0U125                            |
| 1050      | 116x180     | 1,1           | ≤50      | 4974       | 2,0        | 83                      | KE1111102_6K0T180                            |
| 1200      | 136x150     | 1,0           | ≤45      | 7234       | 1,7        | 91                      | KE1111122_6K0U150                            |
| 1400      | 116x230     | 1,2           | ≤60      | 4886       | 1,7        | 87                      | KE1111142_6K0T230                            |
| 1500      | 136x180     | 1,1           | ≤50      | 7105       | 1,6        | 94                      | KE1111152_6K0U180                            |
| 2100      | 136x230     | 1,1           | ≤60      | 7330       | 1,4        | 98                      | KE1111212_6K0U230                            |

**RATED  
VOLTAGE  
1100VDC**

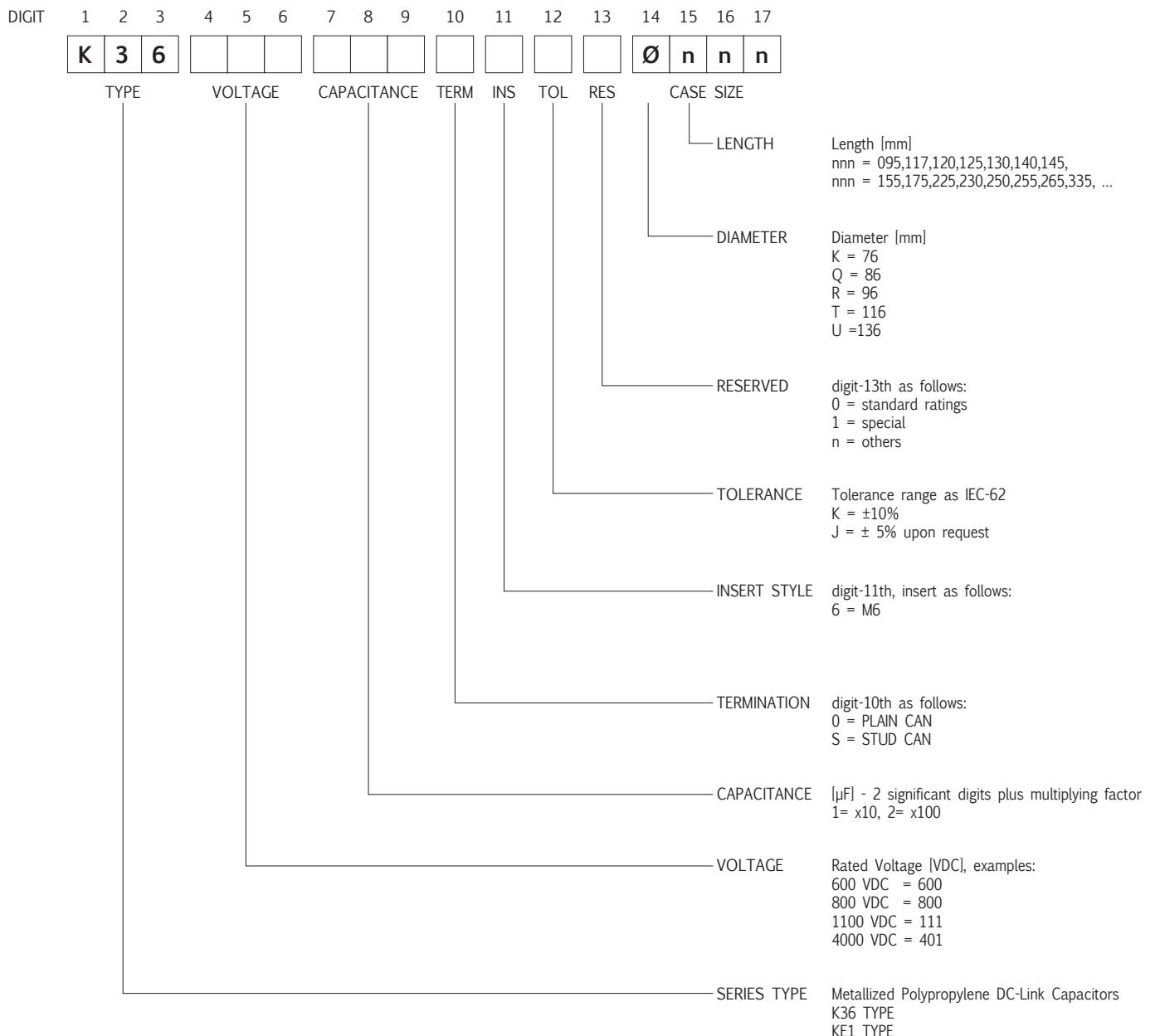
## KE1 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x L<br>mm | ESR<br>TYP mΩ | Ls<br>nH | Ipeak<br>A | Rth<br>K/W | Ir ms<br>10 kHz<br>45°C | PART NUMBER<br>Termination digit<br>excluded |
|-----------|-------------|---------------|----------|------------|------------|-------------------------|--|
| 180       | 76x95       | 2,1           | ≤50      | 952        | 4,6        | 40                      | KE1121181_6K0K095                            |
| 230       | 86x95       | 1,9           | ≤50      | 1216       | 3,9        | 45                      | KE1121231_6K0Q095                            |
| 250       | 76x120      | 2,3           | ≤60      | 974        | 4,1        | 40                      | KE1121251_6K0K120                            |
| 280       | 76x145      | 1,3           | ≤45      | 1884       | 3,7        | 56                      | KE1121281_6K0K145                            |
| 300       | 96x100      | 1,8           | ≤50      | 1586       | 3,3        | 51                      | KE1121301_6K0R100                            |
| 330       | 86x120      | 2,1           | ≤60      | 1286       | 3,5        | 45                      | KE1121331_6K0Q120                            |
| 360       | 76x175      | 1,3           | ≤50      | 1904       | 3,3        | 58                      | KE1121361_6K0K175                            |
| 380       | 86x145      | 1,2           | ≤45      | 2557       | 3,2        | 63                      | KE1121381_6K0Q145                            |
| 400       | 96x125      | 1,9           | ≤60      | 1558       | 3,0        | 51                      | KE1121401_6K0R125                            |
| 450       | 116x100     | 1,6           | ≤50      | 2379       | 2,6        | 60                      | KE1121451_6K0T100                            |
| 480       | 86x175      | 1,2           | ≤50      | 2538       | 2,9        | 65                      | KE1121481_6K0Q175                            |
| 500       | 76x225      | 1,5           | ≤60      | 1948       | 2,9        | 60                      | KE1121501_6K0K225                            |
| 580       | 96x180      | 1,2           | ≤50      | 3067       | 2,5        | 71                      | KE1121581_6K0R180                            |
| 600       | 116x125     | 1,7           | ≤60      | 2338       | 2,3        | 60                      | KE1121601_6K0T125                            |
| 650       | 136x100     | 1,5           | ≤50      | 3437       | 2,1        | 60                      | KE1121651_6K0U100                            |
| 680       | 86x225      | 1,3           | ≤60      | 2649       | 2,5        | 67                      | KE1121681_6K0Q225                            |
| 700       | 116x150     | 1,1           | ≤45      | 4711       | 2,1        | 80                      | KE1121701_6K0T150                            |
| 780       | 96x230      | 1,3           | ≤60      | 3039       | 2,2        | 74                      | KE1121781_6K0R230                            |
| 880       | 136x125     | 1,6           | ≤60      | 3429       | 1,9        | 60                      | KE1121881_6K0U125                            |
| 880       | 116x180     | 1,1           | ≤50      | 4653       | 2,0        | 83                      | KE1121881_6K0T180                            |
| 1000      | 136x150     | 1,0           | ≤45      | 6730       | 1,7        | 91                      | KE1121102_6K0U150                            |
| 1200      | 116x230     | 1,2           | ≤60      | 4675       | 1,7        | 86                      | KE1121122_6K0T230                            |
| 1300      | 136x180     | 1,1           | ≤50      | 6874       | 1,6        | 94                      | KE1121132_6K0U180                            |
| 1700      | 136x230     | 1,1           | ≤60      | 6624       | 1,4        | 98                      | KE1121172_6K0U230                            |

**RATED  
VOLTAGE  
1200VDC**

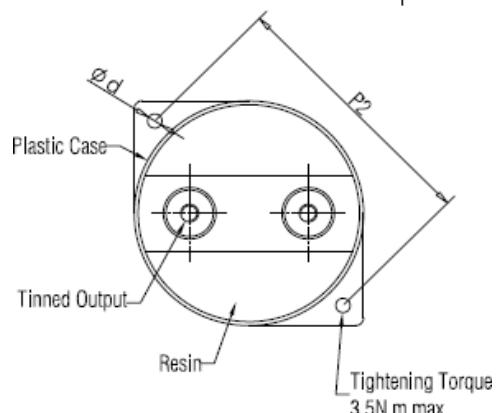
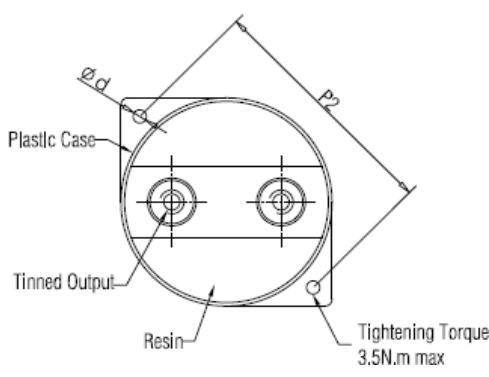
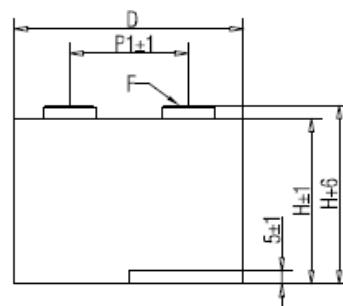
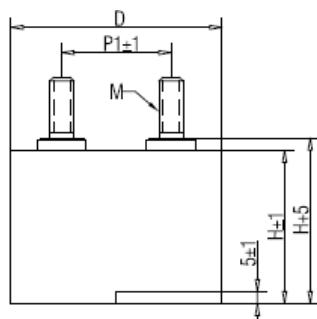
## PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS

Total length is 17 digits



# K37 TYPE -40°C +105°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type                             |
| <b>Coating</b>                       | Solvent resistant plastic case. Flammability class UL94 V-0      |
| <b>Operating temperature range</b>   | -40 to +105 °C (Hotspot temperature)                             |
| <b>Capacitance</b>                   | 6,8 to 500µF   |
| <b>Rated Voltage</b>                 | 500 to 2200 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤2x10⁻³ Measured at 100 Hz and 20±5°C                            |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)               |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C                              |
| <b>Test voltage terminal to case</b> | 3KVAC/50Hz for 60s   |
| <b>Insulation resistance</b>         | ≥30000 s , after 1 minute of electrification at 100VDC (20±5°C ) |



| Case code | D<br>(mm) | M      | Torque      | F    | Torque      | P1<br>(mm) | P2<br>(mm) | d<br>(mm) |
|-----------|-----------|--------|-------------|------|-------------|------------|------------|-----------|
| A         | 87        | M8*20  | 8.5 N.M Max | M6*8 | 4.5 N.M Max | 45         | 101        | 5,5       |
| B         | 115       | M10*20 | 12 N.M Max  | M8*8 | 8.5 N.M Max | 60         | 133        | 6,5       |

## VOLTAGE LEVEL

|           |      |      |      |      |      |       |       |       |       |       |       |       |
|-----------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| Un @ 85°C | 500V | 600V | 700V | 800V | 900V | 1000V | 1100V | 1200V | 1500V | 1800V | 2000V | 2200V |
| Un @105°C | 365V | 435V | 510V | 580V | 655V | 730V  | 800V  | 875V  | 1095V | 1310V | 1460V | 1605V |

## K37 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 125       | 87             | 41 | ≤25      | 15            | 90                     | 1,2                | 6,8        | K375001210_K0L041              |
| 200       | 87             | 51 | ≤32      | 9             | 90                     | 1,2                | 5,9        | K375002010_K0L051              |
| 275       | 87             | 65 | ≤40      | 7             | 85                     | 1,3                | 5,0        | K375002710_K0L065              |
| 350       | 115            | 51 | ≤32      | 10            | 120                    | 1,0                | 4,1        | K375003510_K0S051              |
| 500       | 115            | 65 | ≤40      | 6             | 125                    | 1,1                | 3,5        | K375005010_K0S065              |

RATED  
VDC

500V

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 100       | 87             | 41 | ≤25      | 15            | 90                     | 1,3                | 6,8        | K377001010_K0L041              |
| 150       | 87             | 51 | ≤32      | 11            | 90                     | 1,3                | 5,9        | K377001510_K0L051              |
| 220       | 87             | 65 | ≤40      | 7             | 85                     | 1,4                | 5,0        | K377002210_K0L065              |
| 250       | 115            | 51 | ≤32      | 11            | 115                    | 1,1                | 4,1        | K377002510_K0S051              |
| 350       | 115            | 65 | ≤40      | 7             | 120                    | 1,1                | 3,5        | K377003510_K0S065              |

RATED  
VDC

700V

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 68        | 87             | 41 | ≤25      | 19            | 80                     | 1,5                | 6,8        | K379006800_K0L041              |
| 100       | 87             | 51 | ≤32      | 12            | 80                     | 1,5                | 5,9        | K379001010_K0L051              |
| 140       | 87             | 65 | ≤40      | 8             | 75                     | 1,5                | 5,0        | K379001410_K0L065              |
| 200       | 115            | 51 | ≤32      | 12            | 110                    | 1,2                | 4,1        | K379002010_K0S051              |
| 300       | 115            | 65 | ≤40      | 8             | 115                    | 1,2                | 3,5        | K379003010_K0S065              |

RATED  
VDC

900V

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 47        | 87             | 41 | ≤25      | 22            | 75                     | 1,8                | 6,8        | K371114700_K0L041              |
| 68        | 87             | 51 | ≤32      | 15            | 75                     | 1,7                | 5,9        | K371116800_K0L051              |
| 100       | 87             | 65 | ≤40      | 10            | 70                     | 1,7                | 5,0        | K371111010_K0L065              |
| 125       | 115            | 51 | ≤32      | 15            | 105                    | 1,3                | 4,1        | K371111210_K0S051              |
| 180       | 115            | 65 | ≤40      | 10            | 110                    | 1,3                | 3,5        | K371111810_K0S065              |

RATED  
VDC

1100V

## K37 TYPE STANDARD RATINGS

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 25        | 87             | 41 | ≤25      | 30            | 60                     | 2,5                | 6,8        | K371212500_K0L041              |
| 35        | 87             | 51 | ≤32      | 22            | 60                     | 2,2                | 5,9        | K371213500_K0L051              |
| 50        | 87             | 65 | ≤40      | 14            | 55                     | 2,2                | 5,0        | K371215000_K0L065              |
| 60        | 115            | 51 | ≤32      | 22            | 100                    | 1,7                | 4,1        | K371216000_K0S051              |
| 80        | 115            | 65 | ≤40      | 14            | 110                    | 1,7                | 3,5        | K371218000_K0S065              |

**RATED  
VDC**

**1200V**

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 18        | 87             | 41 | ≤25      | 36            | 55                     | 3,0                | 6,8        | K371511800_K0L041              |
| 25        | 87             | 51 | ≤32      | 25            | 55                     | 2,7                | 5,9        | K371512500_K0L051              |
| 35        | 87             | 65 | ≤40      | 16            | 50                     | 2,7                | 5,0        | K371513500_K0L065              |
| 47        | 115            | 51 | ≤32      | 24            | 100                    | 1,8                | 4,1        | K371514700_K0S051              |
| 68        | 115            | 65 | ≤40      | 16            | 105                    | 1,8                | 3,5        | K371516800_K0S065              |

**RATED  
VDC**

**1500V**

| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 10        | 87             | 41 | ≤25      | 48            | 50                     | 4,6                | 6,8        | K371811000_K0L041              |
| 15        | 87             | 51 | ≤32      | 33            | 50                     | 3,7                | 5,9        | K371811500_K0L051              |
| 22        | 87             | 65 | ≤40      | 22            | 45                     | 3,4                | 5,0        | K371812200_K0L065              |
| 25        | 115            | 51 | ≤32      | 33            | 90                     | 2,6                | 4,1        | K371812500_K0S051              |
| 35        | 115            | 65 | ≤40      | 23            | 100                    | 2,4                | 3,5        | K371813500_K0S065              |

**RATED  
VDC**

**1800V**

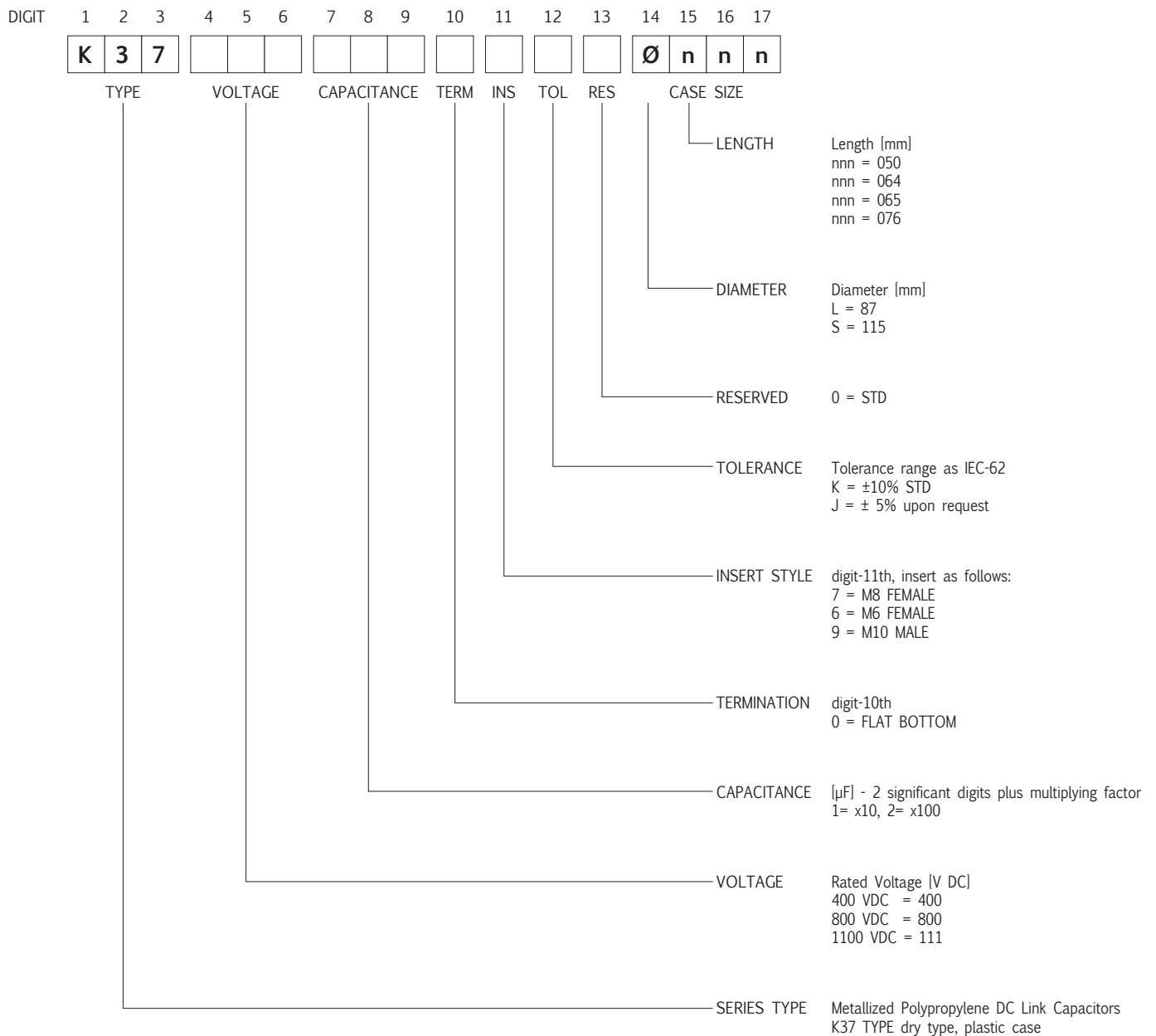
| Cap<br>µF | Ø x H<br>mm mm |    | Ls<br>nH | du/dt<br>V/µs | Max@45°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | Rth<br>K/W | PART NUMBER<br>Insert excluded |
|-----------|----------------|----|----------|---------------|------------------------|--------------------|------------|--------------------------------|
| 6,8       | 87             | 41 | ≤25      | 61            | 50                     | 6,2                | 6,8        | K372216D80_K0L041              |
| 10        | 87             | 51 | ≤32      | 41            | 50                     | 4,9                | 5,9        | K372211000_K0L051              |
| 15        | 87             | 65 | ≤40      | 26            | 45                     | 4,3                | 5,0        | K372211500_K0L065              |
| 18        | 115            | 51 | ≤32      | 41            | 90                     | 3,1                | 4,1        | K372211800_K0S051              |
| 25        | 115            | 65 | ≤40      | 28            | 100                    | 2,8                | 3,5        | K372212500_K0S065              |

**RATED  
VDC**

**2200V**

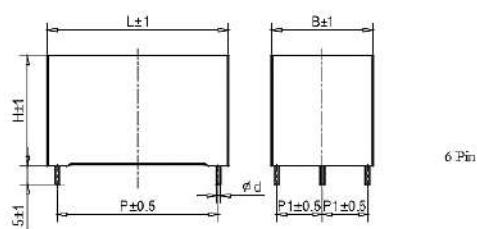
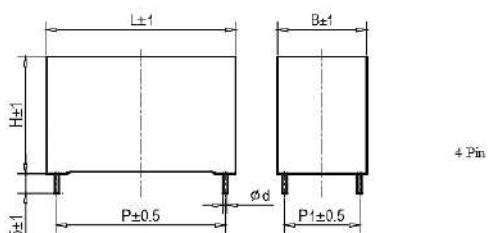
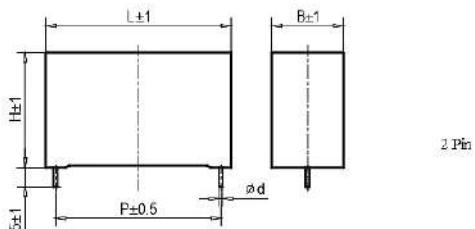
## PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS

Total length is 17 digits



# KE2 TYPE -40°C +105°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | DC-Link capacitor for Inverter, DC filtering, HEV, EV motor drive                |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type   |
| <b>Coating</b>                       | Solvent resistant plastic case. Flammability class UL94 V-0                      |
| <b>Terminals</b>                     | Tinned red copper wire (lead-free). 2, 4 or 6 terminals                          |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +105°C  |
| <b>Capacitance</b>                   | 1.0 to 145µF   |
| <b>Rated Voltage</b>                 | 700 to 1200 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤1.0x10 <sup>-3</sup> Measured at 100 Hz and 20±5°C                              |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | Un≤1300V, 3KVAC (10s, 50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s, 50Hz)               |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## DC VOLTAGE RATINGS\*

|             |      |      |      |      |      |       |       |       |
|-------------|------|------|------|------|------|-------|-------|-------|
| Un at 70°C  | 500V | 600V | 700V | 800V | 900V | 1000V | 1100V | 1200V |
| Un at 85°C  | 450V | 500V | 600V | 700V | 760V | 850V  | 900V  | 1000V |
| Un at 105°C | 330V | 365V | 440V | 500V | 550V | 620V  | 650V  | 730V  |

(\* ) Voltage derating depending on working temperature

## KE2 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 3,0       | 9    | 18   | 31   | 27,5 |      | 0,8 | 30            | 3,6                    | 25,8               | KE27003D02PK01BHL |
| 4,0       | 11   | 20   | 31   | 27,5 |      | 0,8 | 30            | 4,4                    | 19,9               | KE27004D02PK01BHL |
| 6,0       | 13   | 22   | 31   | 27,5 |      | 0,8 | 30            | 5,0                    | 13,8               | KE27006D02PK01BHL |
| 8,0       | 15   | 24,5 | 31   | 27,5 |      | 0,8 | 30            | 5,0                    | 10,7               | KE27008D02PK01BHL |
| 10        | 17   | 28   | 31   | 27,5 |      | 0,8 | 30            | 5,0                    | 8,8                | KE27001002PK01BHL |
| 15        | 18   | 33   | 31   | 27,5 |      | 0,8 | 30            | 5,0                    | 6,4                | KE27001502PK01BHL |
| 17        | 22   | 31   | 31   | 27,5 | 10,2 | 0,8 | 30            | 10,1                   | 5,6                | KE27001704PK01BHL |
| 22        | 22   | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 21            | 11,3                   | 6,7                | KE27002204PK01BHL |
| 40        | 28   | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 21            | 15,9                   | 4,2                | KE27004004PK01BHL |
| 50        | 30   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 21            | 18,4                   | 3,6                | KE27005004PK01BHL |
| 60        | 33   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 21            | 20,1                   | 3,2                | KE27006004PK01BHL |
| 80        | 30   | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 14            | 19,6                   | 3,9                | KE27008004PK01BHL |
| 100       | 35   | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 14            | 22,6                   | 3,4                | KE27001014PK01BHL |
| 145       | 42,5 | 56   | 57,5 | 52,5 | 20,3 | 1,2 | 14            | 22,6                   | 2,7                | KE27001414PK11BHL |
| 145       | 42,5 | 56   | 57,5 | 52,5 | 10,2 | 1,2 | 14            | 26,6                   | 2,9                | KE27001416PK11BHL |

RATED  
VOLTAGE  
700VDC

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 2,0       | 9    | 18   | 31   | 27,5 |      | 0,8 | 36            | 3,1                    | 34,9               | KE28002D02PK01BHL |
| 3,0       | 11   | 20   | 31   | 27,5 |      | 0,8 | 36            | 4,0                    | 24,0               | KE28003D02PK01BHL |
| 4,0       | 13   | 22   | 31   | 27,5 |      | 0,8 | 36            | 4,9                    | 18,4               | KE28004D02PK01BHL |
| 6,0       | 15   | 24,5 | 31   | 27,5 |      | 0,8 | 36            | 5,0                    | 12,8               | KE28006D02PK01BHL |
| 8,0       | 17   | 28   | 31   | 27,5 |      | 0,8 | 36            | 5,0                    | 10,0               | KE28008D02PK01BHL |
| 10        | 18   | 33   | 31   | 27,5 |      | 0,8 | 36            | 5,0                    | 8,2                | KE28001002PK01BHL |
| 12        | 22   | 31   | 31   | 27,5 | 10,2 | 0,8 | 36            | 10,0                   | 6,9                | KE28001204PK01BHL |
| 16        | 22   | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 28            | 10,3                   | 8,0                | KE28001604PK01BHL |
| 25        | 28   | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 28            | 13,9                   | 5,5                | KE28002504PK01BHL |
| 35        | 30   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 28            | 16,9                   | 4,3                | KE28003504PK01BHL |
| 42        | 33   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 28            | 18,5                   | 3,7                | KE28004204PK01BHL |
| 55        | 30   | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 16            | 17,9                   | 4,7                | KE28005504PK01BHL |
| 75        | 35   | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 16            | 21,4                   | 3,8                | KE28007504PK01BHL |
| 110       | 42,5 | 56   | 57,5 | 52,5 | 20,3 | 1,2 | 16            | 22,6                   | 2,9                | KE28001114PK01BHL |
| 110       | 42,5 | 56   | 57,5 | 52,5 | 10,2 | 1,2 | 16            | 25,5                   | 3,1                | KE28001116PK01BHL |

RATED  
VOLTAGE  
800VDC

## KE2 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 1,5       | 9    | 18   | 31   | 27,5 |      | 0,8 | 45            | 2,8                    | 44,0               | KE29001D52PK01BHL |
| 2,5       | 11   | 20   | 31   | 27,5 |      | 0,8 | 45            | 3,8                    | 27,3               | KE29002D52PK01BHL |
| 3,3       | 13   | 22   | 31   | 27,5 |      | 0,8 | 45            | 4,6                    | 21,1               | KE29003D32PK01BHL |
| 4,5       | 15   | 24,5 | 31   | 27,5 |      | 0,8 | 45            | 5,0                    | 15,9               | KE29004D52PK01BHL |
| 6,0       | 17   | 28   | 31   | 27,5 |      | 0,8 | 45            | 5,0                    | 12,3               | KE29006D02PK01BHL |
| 8,5       | 18   | 33   | 31   | 27,5 |      | 0,8 | 45            | 5,0                    | 9,1                | KE29008D52PK01BHL |
| 10        | 22   | 31   | 31   | 27,5 | 10,2 | 0,8 | 45            | 9,4                    | 7,7                | KE29001004PK01BHL |
| 14        | 22   | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 32            | 10,0                   | 8,5                | KE29001404PK01BHL |
| 25        | 28   | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 32            | 14,2                   | 5,3                | KE29002504PK01BHL |
| 33        | 30   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 32            | 16,9                   | 4,3                | KE29003304PK01BHL |
| 35        | 33   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 32            | 17,7                   | 4,1                | KE29003504PK01BHL |
| 50        | 30   | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 17,7                   | 4,8                | KE29005004PK01BHL |
| 65        | 35   | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 20,9                   | 4,0                | KE29006504PK01BHL |
| 90        | 42,5 | 56   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 22,6                   | 3,2                | KE29009004PK01BHL |
| 90        | 42,5 | 56   | 57,5 | 52,5 | 10,2 | 1,2 | 20            | 24,6                   | 3,4                | KE29009006PK01BHL |

RATED  
VOLTAGE  
900VDC

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 1,2       | 9    | 18   | 31   | 27,5 |      | 0,8 | 45            | 2,6                    | 51,5               | KE21111D22PK01BHL |
| 2,0       | 11   | 20   | 31   | 27,5 |      | 0,8 | 45            | 3,5                    | 31,9               | KE21112D02PK01BHL |
| 2,5       | 13   | 22   | 31   | 27,5 |      | 0,8 | 45            | 4,1                    | 25,9               | KE21112D52PK01BHL |
| 3,5       | 15   | 24,5 | 31   | 27,5 |      | 0,8 | 45            | 5,0                    | 19,0               | KE21113D52PK01BHL |
| 5,0       | 17   | 28   | 31   | 27,5 |      | 0,8 | 45            | 5,0                    | 13,7               | KE21115D02OK01BHL |
| 6,0       | 18   | 33   | 31   | 27,5 |      | 0,8 | 45            | 5,0                    | 11,7               | KE21116D02PK01BHL |
| 6,0       | 18   | 33   | 31   | 27,5 | 10,2 | 0,8 | 45            | 7,4                    | 11,5               | KE21116D04PK01BHL |
| 7,5       | 22   | 31   | 31   | 27,5 | 10,2 | 0,8 | 45            | 8,5                    | 9,4                | KE21117D54PK01BHL |
| 10        | 22   | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 32            | 9,0                    | 10,5               | KE21111004PK01BHL |
| 18        | 28   | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 32            | 12,9                   | 6,4                | KE21111804PK01BHL |
| 22        | 30   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 32            | 14,9                   | 5,5                | KE21112204PK01BHL |
| 25        | 33   | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 32            | 16,1                   | 4,9                | KE21112504PK01BHL |
| 35        | 30   | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 16,0                   | 5,9                | KE21113504PK01BHL |
| 50        | 35   | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 19,7                   | 4,5                | KE21115004PK01BHL |
| 65        | 42,5 | 56   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 22,6                   | 3,7                | KE21116504PK01BHL |

RATED  
VOLTAGE  
1100VDC

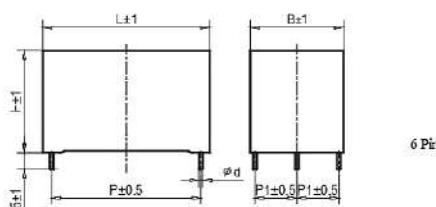
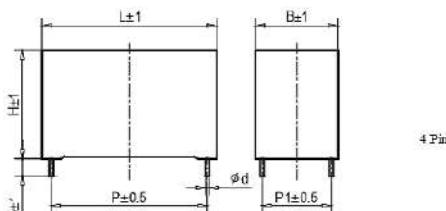
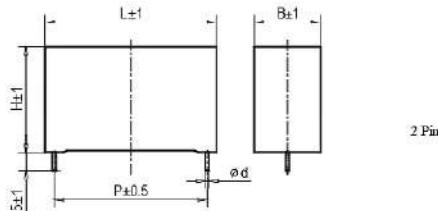
## KE2 TYPE STANDARD RATINGS

| Cap<br>µF | Dimensions (mm) |      |      |      |      | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|-----------------|------|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
|           | B               | H    | L    | P    | P1   |     |               |                        |                    |                   |
| 1,0       | 9               | 18   | 31   | 27,5 |      | 0,8 | 50            | 2,4                    | 58,5               | KE21211D02PK01BHL |
| 1,5       | 11              | 20   | 31   | 27,5 |      | 0,8 | 50            | 3,1                    | 39,9               | KE21211D52PK01BHL |
| 2,0       | 13              | 22   | 31   | 27,5 |      | 0,8 | 50            | 3,8                    | 30,4               | KE21212D02PK01BHL |
| 3,0       | 15              | 24,5 | 31   | 27,5 |      | 0,8 | 50            | 4,9                    | 20,9               | KE21213D02PK01BHL |
| 4,0       | 17              | 28   | 31   | 27,5 |      | 0,8 | 50            | 5,0                    | 16,0               | KE21214D02PK01BHL |
| 5,0       | 18              | 33   | 31   | 27,5 |      | 0,8 | 50            | 5,0                    | 13,1               | KE21215D02PK01BHL |
| 6,0       | 22              | 31   | 31   | 27,5 | 10,2 | 0,8 | 50            | 7,9                    | 11,0               | KE21216D04PK01BHL |
| 8,0       | 22              | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 38            | 8,4                    | 12,2               | KE21218D04PK01BHL |
| 14        | 28              | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 38            | 12,0                   | 7,5                | KE21211404PK01BHL |
| 18        | 30              | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 38            | 14,2                   | 6,1                | KE21211804PK01BHL |
| 20        | 33              | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 38            | 15,2                   | 5,6                | KE21212004PK01BHL |
| 30        | 30              | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 30            | 15,6                   | 6,2                | KE21213004PK01BHL |
| 40        | 35              | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 30            | 18,7                   | 5,0                | KE21214004PK01BHL |
| 55        | 42,5            | 56   | 57,5 | 52,5 | 20,3 | 1,2 | 30            | 22,6                   | 3,9                | KE21215504PK01BHL |

**RATED  
VOLTAGE  
1200VDC**

# KE4 TYPE -40°C +105°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | DC-Link capacitor for Inverter, DC filtering, HEV, EV motor drive                |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type   |
| <b>Coating</b>                       | Solvent resistant plastic case. Flammability class UL94 V-0                      |
| <b>Terminals</b>                     | Tinned red copper wire (lead-free). 2, 4 or 6 terminals                          |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +105°C  |
| <b>Capacitance</b>                   | 6 to 90µF  |
| <b>Rated Voltage</b>                 | 700 to 1100 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤1.0x10 <sup>-3</sup> Measured at 100 Hz and 20±5°C                              |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | Un≤1300V, 3KVAC (10s, 50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s, 50Hz)               |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## DC VOLTAGE RATINGS\*

|             |      |      |      |      |      |       |       |       |
|-------------|------|------|------|------|------|-------|-------|-------|
| Un at 70°C  | 500V | 600V | 700V | 800V | 900V | 1000V | 1100V | 1200V |
| Un at 85°C  | 450V | 500V | 600V | 700V | 760V | 850V  | 900V  | 1000V |
| Un at 105°C | 330V | 365V | 440V | 500V | 550V | 620V  | 650V  | 730V  |

(\* ) Voltage derating depending on working temperature

## KE4 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H  | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|----|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 15        | 22   | 30 | 42,5 | 37,5 |      | 1,2 | 21            | 10,2                   | 8,2                | KE47001502PK01BHL |
| 22        | 28   | 37 | 42,5 | 37,5 |      | 1,2 | 21            | 11,3                   | 6,0                | KE47002202PK01BHL |
| 22        | 28   | 37 | 42,5 | 37,5 | 10,2 | 1,2 | 21            | 13,5                   | 5,8                | KE47002204PK01BHL |
| 30        | 30   | 45 | 42,5 | 37,5 |      | 1,2 | 21            | 11,3                   | 4,8                | KE47003302PK01BHL |
| 30        | 30   | 45 | 42,5 | 37,5 | 20,3 | 1,2 | 21            | 16,3                   | 4,6                | KE47003304PK01BHL |
| 35        | 33   | 45 | 42,5 | 37,5 |      | 1,2 | 21            | 11,3                   | 4,3                | KE47003502PK01BHL |
| 35        | 33   | 45 | 42,5 | 37,5 | 20,3 | 1,2 | 21            | 17,7                   | 4,1                | KE47003504PK01BHL |
| 45        | 30   | 45 | 57,5 | 52,5 |      | 1,2 | 14            | 11,3                   | 5,4                | KE47004502PK01BHL |
| 45        | 30   | 45 | 57,5 | 52,5 | 20,3 | 1,2 | 14            | 17,0                   | 5,2                | KE47004504PK01BHL |
| 55        | 35   | 50 | 57,5 | 52,5 |      | 1,2 | 14            | 11,3                   | 4,7                | KE47005502PK01BHL |
| 55        | 35   | 50 | 57,5 | 52,5 | 20,3 | 1,2 | 14            | 19,6                   | 4,5                | KE47005504PK01BHL |
| 90        | 42,5 | 56 | 57,5 | 52,5 | 20,3 | 1,2 | 14            | 22,6                   | 3,2                | KE47009004PK01BHL |

RATED  
VOLTAGE  
700VDC

| Cap<br>µF | B    | H  | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|----|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 10        | 22   | 30 | 42,5 | 37,5 |      | 1,2 | 30            | 8,9                    | 10,8               | KE49001002PK01BHL |
| 15        | 28   | 37 | 42,5 | 37,5 |      | 1,2 | 30            | 11,3                   | 7,2                | KE49001502PK01BHL |
| 15        | 28   | 37 | 42,5 | 37,5 | 10,2 | 1,2 | 30            | 12,3                   | 7,0                | KE49001504PK01BHL |
| 20        | 30   | 45 | 42,5 | 37,5 |      | 1,2 | 30            | 11,3                   | 5,8                | KE49002002PK01BHL |
| 20        | 30   | 45 | 42,5 | 37,5 | 20,3 | 1,2 | 30            | 14,8                   | 5,6                | KE49002004PK01BHL |
| 22        | 33   | 45 | 42,5 | 37,5 |      | 1,2 | 30            | 11,3                   | 5,4                | KE49002202PK01BHL |
| 22        | 33   | 45 | 42,5 | 37,5 | 20,3 | 1,2 | 30            | 15,8                   | 5,2                | KE49002204PK01BHL |
| 30        | 30   | 45 | 57,5 | 52,5 |      | 1,2 | 20            | 11,3                   | 6,4                | KE49003002PK01BHL |
| 30        | 30   | 45 | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 15,6                   | 6,2                | KE49003004PK01BHL |
| 40        | 35   | 50 | 57,5 | 52,5 |      | 1,2 | 20            | 11,3                   | 5,2                | KE49004002PK01BHL |
| 40        | 35   | 50 | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 18,7                   | 5,0                | KE49004004PK01BHL |
| 55        | 42,5 | 56 | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 22,6                   | 3,9                | KE49005504PK01BHL |

RATED  
VOLTAGE  
900VDC

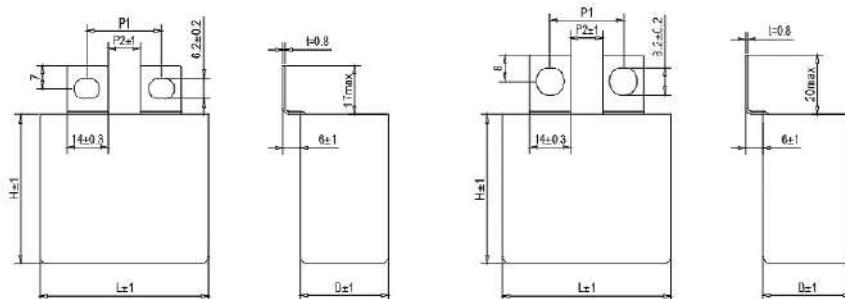
| Cap<br>µF | B    | H  | L    | P    | P1   | d   | du/dt<br>V/µs | Max@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|------|----|------|------|------|-----|---------------|------------------------|--------------------|-------------------|
| 6,0       | 22   | 30 | 42,5 | 37,5 |      | 1,2 | 39            | 7,7                    | 14,4               | KE41116D02PK01BHL |
| 10        | 28   | 37 | 42,5 | 37,5 |      | 1,2 | 39            | 10,8                   | 9,2                | KE41111002PK01BHL |
| 10        | 28   | 37 | 42,5 | 37,5 | 10,2 | 1,2 | 39            | 10,9                   | 9,0                | KE41111004PK01BHL |
| 14        | 30   | 45 | 42,5 | 37,5 |      | 1,2 | 39            | 11,3                   | 7,0                | KE41111402PK01BHL |
| 14        | 30   | 45 | 42,5 | 37,5 | 20,3 | 1,2 | 39            | 13,4                   | 6,8                | KE41111404PK01BHL |
| 15        | 33   | 45 | 42,5 | 37,5 |      | 1,2 | 39            | 11,3                   | 6,6                | KE41111502PK01BHL |
| 15        | 33   | 45 | 42,5 | 37,5 | 20,3 | 1,2 | 39            | 14,2                   | 6,4                | KE41111504PK01BHL |
| 22        | 30   | 45 | 57,5 | 52,5 |      | 1,2 | 26            | 11,3                   | 7,3                | KE41112202PK01BHL |
| 22        | 30   | 45 | 57,5 | 52,5 | 20,3 | 1,2 | 26            | 14,6                   | 7,1                | KE41112204PK01BHL |
| 25        | 35   | 50 | 57,5 | 52,5 |      | 1,2 | 26            | 11,3                   | 6,6                | KE41112502PK01BHL |
| 25        | 35   | 50 | 57,5 | 52,5 | 20,3 | 1,2 | 26            | 16,4                   | 6,4                | KE41112504PK01BHL |
| 40        | 42,5 | 56 | 57,5 | 52,5 | 20,3 | 1,2 | 26            | 21,4                   | 4,4                | KE41114004PK01BHL |

RATED  
VOLTAGE  
1100VDC

# KE5 TYPE -40°C +105°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | IGBT surge absorption  |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type   |
| <b>Coating</b>                       | Solvent resistant plastic case. Flammability class UL94 V-0                      |
| <b>Terminals</b>                     | Brass lug terminals (lead-free)  |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +105°C  |
| <b>Capacitance</b>                   | 0.033 to 10µF  |
| <b>Rated Voltage</b>                 | 700 to 4500 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤6x10 <sup>-4</sup> Measured at 1KHz and 20±5°C                                  |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | Un≤1300V, 3KVAC (10s, 50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s, 50Hz)               |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |

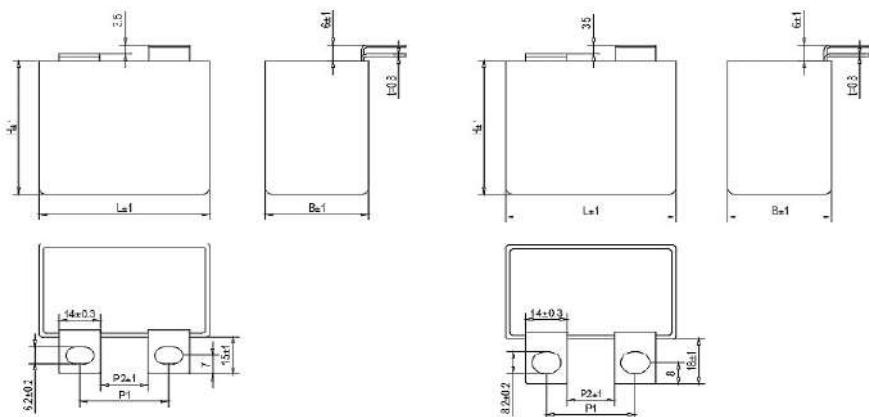
## Lug style A



| SIZE<br>L | LUG A1 M6 |         | LUG A2 M6 |         | LUG A3 M8 |         | LUG A4 M8 |         |
|-----------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
|           | P2        | P1      | P2        | P1      | P2        | P1      | P2        | P1      |
| 42,5      | 11        | 23 - 28 | 8         | 20 - 25 | 11        | 24 - 26 | 8         | 21 - 23 |
| 57,5      | 11        | 23 - 28 | 24        | 36 - 41 | 11        | 24 - 26 | 24        | 37 - 39 |

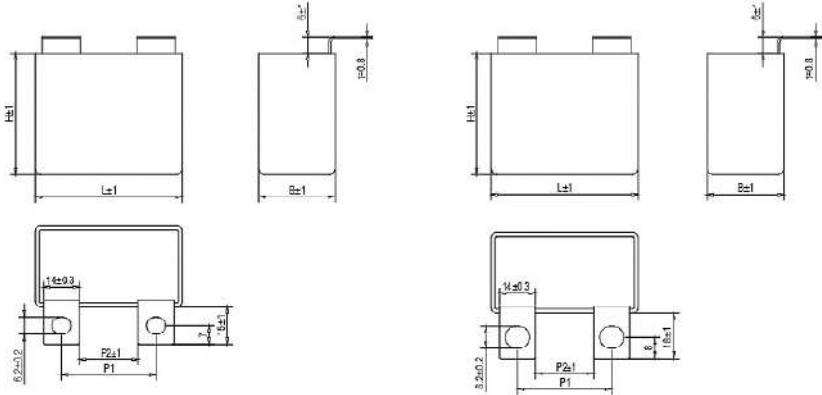
## KE5 TYPE STANDARD RATINGS

**Lug style B**



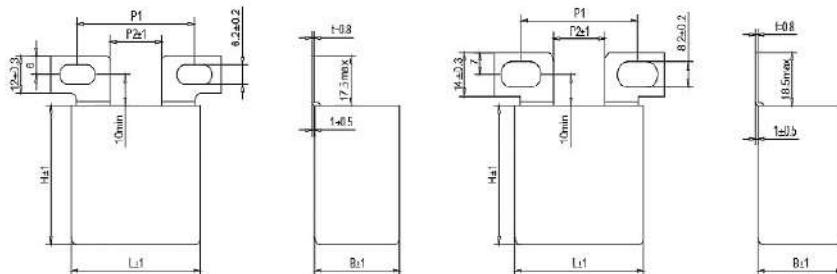
| SIZE<br>L | LUG B1 M6 |         | LUG B2 M6 |         | LUG B3 M8 |         | LUG B4 M8 |         |
|-----------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
|           | P2        | P1      | P2        | P1      | P2        | P1      | P2        | P1      |
| 42,5      | 11        | 23 - 28 | 8         | 20 - 25 | 11        | 24 - 26 | 8         | 21 - 23 |
| 57,5      | 11        | 23 - 28 | 24        | 36 - 41 | 11        | 24 - 26 | 24        | 37 - 39 |

**Lug style C**



| SIZE<br>L | LUG C1 M6 |         | LUG C2 M6 |         | LUG C3 M8 |         | LUG C4 M8 |         |
|-----------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
|           | P2        | P1      | P2        | P1      | P2        | P1      | P2        | P1      |
| 42,5      | 11        | 23 - 28 | 8         | 20 - 25 | 11        | 24 - 26 | 8         | 21 - 23 |
| 57,5      | 11        | 23 - 28 | 24        | 36 - 41 | 11        | 24 - 26 | 24        | 37 - 39 |

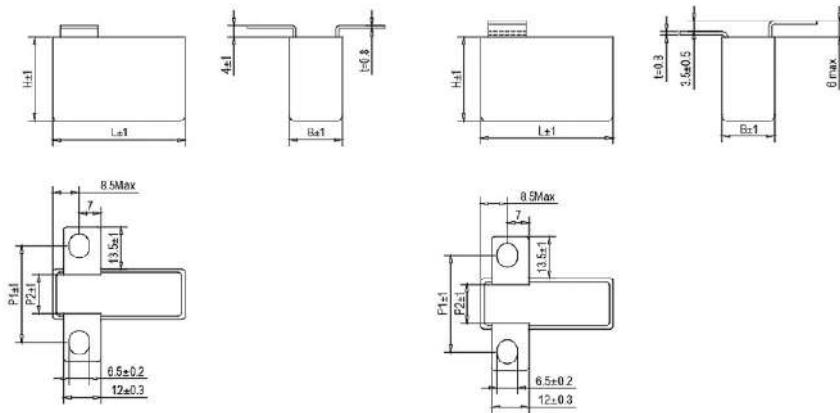
**Lug style D**



| SIZE<br>L | LUG D1 M6 |         | LUG D2 M6 |         | LUG D3 M6 |         | LUG D4 M8 |         | LUG D5 M8 |         | LUG D6 M8 |       |
|-----------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|-------|
|           | P2        | P1      | P2        | P1    |
| 42,5      | 11        | 29 - 41 | 15        | 33 - 45 | -         | -       | 8         | 33 - 42 | 15        | 40 - 49 | -         | -     |
| 57,5      | 11        | 29 - 41 | 15        | 33 - 45 | 28        | 46 - 58 | 15        | 40 - 49 | 24        | 49 - 58 | 28        | 53-62 |

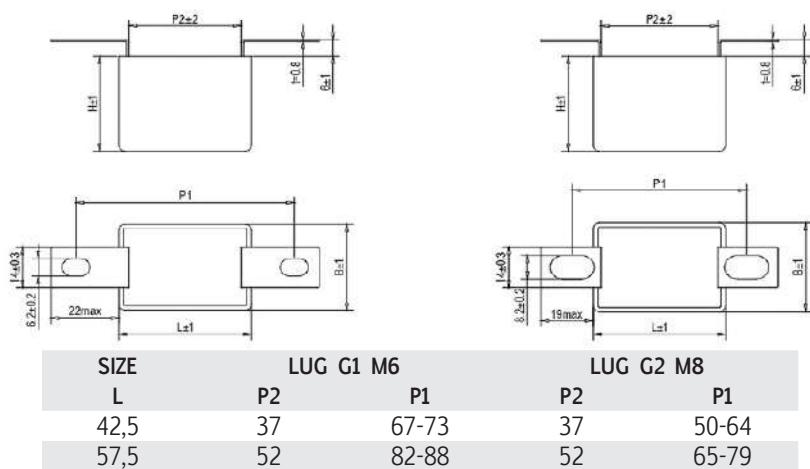
## KE5 TYPE STANDARD RATINGS

### Lug style E-F



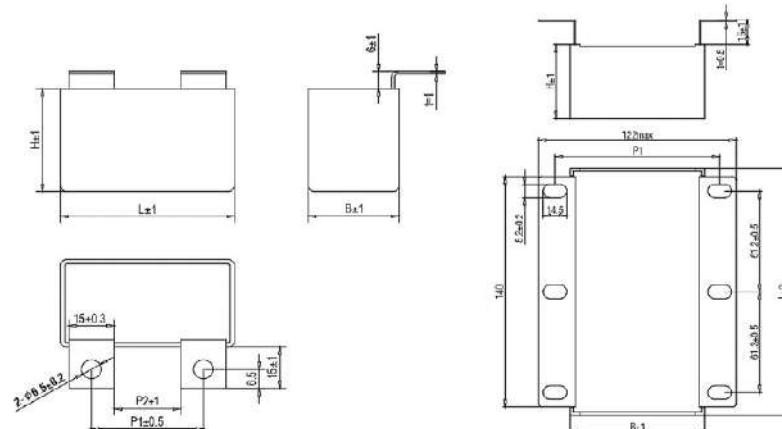
| SIZE | LUG E1 M6 |    |    | LUG F1 M6 |    |
|------|-----------|----|----|-----------|----|
|      | B         | P2 | P1 | P2        | P1 |
| 15   |           | 11 | 30 | 11        | 30 |
| 17   |           | 13 | 32 | 13        | 32 |

### Lug style G



| SIZE | LUG G1 M6 |    |       | LUG G2 M8 |       |
|------|-----------|----|-------|-----------|-------|
|      | L         | P2 | P1    | P2        | P1    |
| 42,5 |           | 37 | 67-73 | 37        | 50-64 |
| 57,5 |           | 52 | 82-88 | 52        | 65-79 |

### Lug style H



| SIZE | LUG H1 M6 |    | LUG H2 M6 |    | LUG I1 M8 |    |        |
|------|-----------|----|-----------|----|-----------|----|--------|
|      | L         | P2 | P1        | P2 | P1        | P2 | P1     |
| 42,5 |           | 8  | 23        |    | -         | -  | -      |
| 57,5 |           | 13 | 28        | 22 | 37        | -  | -      |
| 150  |           | -  | -         | -  | -         | 76 | 94-107 |

## KE5 TYPE STANDARD RATINGS

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 1,0       | 17,0            | 28,0 | 42,5 | 325           | 325          | ≤25        | 12,9                    | 4,3                 | KE57001D0_K01BHL |
| 1,0       | 24,5            | 27,5 | 42,5 | 325           | 325          | ≤25        | 14,2                    | 4,3                 | KE57001D0_K02BHL |
| 1,2       | 24,5            | 27,5 | 42,5 | 325           | 390          | ≤25        | 15,2                    | 3,1                 | KE57001D2_K01BHL |
| 1,5       | 22,0            | 30,0 | 42,5 | 325           | 487          | ≤25        | 16,3                    | 3,5                 | KE57001D5_K01BHL |
| 2,0       | 28,0            | 37,0 | 42,5 | 325           | 650          | ≤25        | 20,1                    | 3,2                 | KE57002D0_K01BHL |
| 2,5       | 33,5            | 35,5 | 42,5 | 325           | 812          | ≤25        | 22,6                    | 2,5                 | KE57002D5_K01BHL |
| 3,0       | 33,0            | 45,0 | 42,5 | 325           | 975          | ≤25        | 24,9                    | 2,4                 | KE57003D0_K01BHL |
| 3,5       | 33,0            | 45,0 | 42,5 | 325           | 1134         | ≤25        | 26,0                    | 2,0                 | KE57003D5_K01BHL |
| 4,0       | 30,0            | 45,0 | 57,5 | 220           | 880          | ≤35        | 24,3                    | 2,3                 | KE57004D0_K01BHL |
| 4,7       | 35,0            | 50,0 | 57,5 | 220           | 1034         | ≤35        | 28,2                    | 2,1                 | KE57004D7_K01BHL |
| 5,0       | 30,0            | 45,0 | 57,5 | 220           | 1100         | ≤35        | 26,0                    | 2,5                 | KE57005D0_K01BHL |
| 5,6       | 35,0            | 50,0 | 57,5 | 220           | 1232         | ≤35        | 28,7                    | 2,0                 | KE57005D6_K01BHL |
| 6,8       | 35,0            | 50,0 | 57,5 | 220           | 1496         | ≤35        | 30,2                    | 2,0                 | KE57006D8_K01BHL |
| 10        | 42,5            | 56,0 | 57,5 | 220           | 2200         | ≤35        | 35,9                    | 1,8                 | KE5700100_K01BHL |

RATED  
VOLTAGE  
700VDC

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 0,22      | 24,5            | 27,5 | 42,5 | 650           | 143          | ≤25        | 10,2                    | 12,8                | KE5121D22_K01BHL |
| 0,22      | 15,0            | 26,0 | 42,5 | 650           | 143          | ≤25        | 8,1                     | 12,8                | KE5121D22_K02BHL |
| 0,33      | 24,5            | 27,5 | 42,5 | 650           | 215          | ≤25        | 11,1                    | 8,9                 | KE5121D33_K01BHL |
| 0,33      | 15,0            | 26,0 | 42,5 | 650           | 215          | ≤25        | 9,2                     | 8,9                 | KE5121D33_K02BHL |
| 0,39      | 17,0            | 28,0 | 42,5 | 650           | 254          | ≤25        | 10,3                    | 7,3                 | KE5121D39_K01BHL |
| 0,47      | 24,5            | 27,5 | 42,5 | 650           | 306          | ≤25        | 12,3                    | 7,0                 | KE5121D47_K01BHL |
| 0,47      | 22,0            | 30,0 | 42,5 | 650           | 306          | ≤25        | 12,1                    | 7,0                 | KE5121D47_K02BHL |
| 0,56      | 22,0            | 30,0 | 42,5 | 650           | 364          | ≤25        | 12,9                    | 5,3                 | KE5121D46_K01BHL |
| 0,56      | 24,5            | 27,5 | 42,5 | 650           | 364          | ≤25        | 13,1                    | 5,3                 | KE5121D46_K02BHL |
| 0,68      | 33,5            | 35,5 | 42,5 | 650           | 442          | ≤25        | 16,5                    | 4,6                 | KE5121D68_K01BHL |
| 0,68      | 22,0            | 30,0 | 42,5 | 650           | 442          | ≤25        | 13,9                    | 4,6                 | KE5121D68_K02BHL |
| 0,82      | 33,5            | 35,5 | 42,5 | 650           | 533          | ≤25        | 17,6                    | 3,9                 | KE5121D82_K01BHL |
| 0,82      | 28,0            | 37,0 | 42,5 | 650           | 533          | ≤25        | 17,6                    | 3,9                 | KE5121D82_K02BHL |
| 1,0       | 33,5            | 35,5 | 42,5 | 650           | 650          | ≤25        | 18,9                    | 3,4                 | KE51211D0_K01BHL |
| 1,0       | 28,0            | 37,0 | 42,5 | 650           | 650          | ≤25        | 18,0                    | 3,4                 | KE51211D0_K02BHL |
| 1,2       | 33,0            | 45,0 | 42,5 | 650           | 780          | ≤25        | 21,2                    | 3,1                 | KE51211D2_K01BHL |
| 1,2       | 30,0            | 45,0 | 42,5 | 650           | 780          | ≤25        | 20,5                    | 4,2                 | KE51211D2_K02BHL |
| 1,5       | 33,0            | 45,0 | 42,5 | 650           | 975          | ≤25        | 22,8                    | 4,1                 | KE51211D5_K01BHL |
| 1,5       | 30,0            | 45,0 | 42,5 | 650           | 975          | ≤25        | 22,2                    | 4,1                 | KE51211D5_K02BHL |
| 2,0       | 30,0            | 45,0 | 57,5 | 455           | 910          | ≤35        | 22,0                    | 3,6                 | KE51212D0_K01BHL |
| 2,2       | 35,0            | 50,0 | 57,5 | 455           | 1001         | ≤35        | 24,3                    | 3,5                 | KE51212D2_K01BHL |
| 2,5       | 35,0            | 50,0 | 57,5 | 455           | 1138         | ≤35        | 25,4                    | 3,2                 | KE51212D5_K01BHL |
| 3,0       | 35,0            | 50,0 | 57,5 | 455           | 1365         | ≤35        | 27,0                    | 3,1                 | KE51213D0_K01BHL |
| 4,5       | 42,5            | 56,0 | 57,5 | 455           | 2047         | ≤35        | 32,8                    | 3,0                 | KE51214D5_K01BHL |

RATED  
VOLTAGE  
1200VDC

## KE5 TYPE STANDARD RATINGS

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 0,22      | 24,5            | 27,5 | 42,5 | 880           | 194          | ≤25        | 10,0                    | 10,2                | KE5171D22_K01BHL |
| 0,22      | 17,0            | 28,0 | 42,5 | 880           | 194          | ≤25        | 9,1                     | 10,2                | KE5171D22_K02BHL |
| 0,33      | 22,0            | 30,0 | 42,5 | 880           | 290          | ≤25        | 11,9                    | 7,9                 | KE5171D33_K02BHL |
| 0,47      | 33,5            | 35,5 | 42,5 | 880           | 413          | ≤25        | 16,6                    | 5,6                 | KE5171D47_K01BHL |
| 0,47      | 28,0            | 37,0 | 42,5 | 880           | 413          | ≤25        | 15,2                    | 5,6                 | KE5171D47_K02BHL |
| 0,56      | 28,0            | 37,0 | 42,5 | 880           | 492          | ≤25        | 16,3                    | 5,5                 | KE5171D56_K01BHL |
| 0,68      | 33,5            | 35,5 | 42,5 | 880           | 598          | ≤25        | 18,0                    | 5,4                 | KE5171D68_K01BHL |
| 0,82      | 33,0            | 45,0 | 42,5 | 880           | 721          | ≤25        | 20,8                    | 5,4                 | KE5171D82_K01BHL |
| 0,82      | 30,0            | 45,0 | 42,5 | 880           | 721          | ≤25        | 19,9                    | 5,4                 | KE5171D82_K02BHL |
| 1,0       | 30,0            | 45,0 | 57,5 | 610           | 610          | ≤35        | 19,6                    | 5,3                 | KE51711D0_K01BHL |
| 1,2       | 30,0            | 45,0 | 57,5 | 610           | 732          | ≤35        | 20,7                    | 4,5                 | KE51711D2_K01BHL |
| 1,5       | 35,0            | 50,0 | 57,5 | 610           | 915          | ≤35        | 24,3                    | 3,7                 | KE51711D5_K01BHL |
| 2,2       | 42,5            | 56   | 57,5 | 610           | 1342         | ≤35        | 29,4                    | 3,5                 | KE51712D2_K01BHL |

RATED  
VOLTAGE  
1700VDC

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 0,10      | 15,0            | 26,0 | 42,5 | 1000          | 100          | ≤25        | 6,5                     | 25,7                | KE5201D10_K01BHL |
| 0,15      | 17,0            | 28,0 | 42,5 | 1000          | 150          | ≤25        | 8,1                     | 14,7                | KE5201D15_K01BHL |
| 0,22      | 22,0            | 30,0 | 42,5 | 1000          | 220          | ≤25        | 10,5                    | 10,5                | KE5201D22_K01BHL |
| 0,33      | 33,5            | 35,5 | 42,5 | 1000          | 330          | ≤25        | 15,0                    | 9,5                 | KE5201D33_K01BHL |
| 0,33      | 28,0            | 37,0 | 42,5 | 1000          | 330          | ≤25        | 13,8                    | 9,5                 | KE5201D33_K02BHL |
| 0,47      | 28,0            | 37,0 | 42,5 | 1000          | 470          | ≤25        | 16,0                    | 5,2                 | KE5201D47_K01BHL |
| 0,56      | 33,0            | 45,0 | 42,5 | 1000          | 560          | ≤25        | 18,7                    | 4,3                 | KE5201D56_K01BHL |
| 0,68      | 30,0            | 45,0 | 57,5 | 700           | 476          | ≤35        | 17,5                    | 5,7                 | KE5201D68_K01BHL |
| 0,82      | 30,0            | 45,0 | 57,5 | 700           | 574          | ≤35        | 19,0                    | 4,5                 | KE5201D82_K01BHL |
| 1,0       | 35,0            | 50,0 | 57,5 | 700           | 700          | ≤35        | 21,9                    | 4,5                 | KE52011D0_K01BHL |
| 1,2       | 35,0            | 50,0 | 57,5 | 700           | 840          | ≤35        | 23,2                    | 4,2                 | KE52011D2_K01BHL |
| 1,8       | 42,5            | 56,0 | 57,5 | 700           | 1260         | ≤35        | 28,3                    | 4,0                 | KE52011D8_K01BHL |

RATED  
VOLTAGE  
2000VDC

## KE5 TYPE STANDARD RATINGS

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 0,047     | 24,5            | 27,5 | 42,5 | 1600          | 75           | ≤25        | 6,1                     | 31,6                | KE5301N47_K01BHL |
| 0,068     | 24,5            | 27,5 | 42,5 | 1600          | 108          | ≤25        | 7,2                     | 22,7                | KE5301N68_K01BHL |
| 0,10      | 33,5            | 35,5 | 42,5 | 1600          | 160          | ≤25        | 9,9                     | 15,0                | KE5301D10_K01BHL |
| 0,10      | 22,0            | 30,0 | 42,5 | 1600          | 160          | ≤25        | 8,5                     | 15,0                | KE5301D01_K02BHL |
| 0,15      | 28,0            | 37,0 | 42,5 | 1600          | 240          | ≤25        | 11,3                    | 10,8                | KE5301D15_K01BHL |
| 0,22      | 33,0            | 45,0 | 42,5 | 1600          | 352          | ≤25        | 16,6                    | 6,6                 | KE5301D22_K01BHL |
| 0,33      | 30,0            | 45,0 | 57,5 | 870           | 287          | ≤35        | 17,4                    | 7,5                 | KE5301D33_K01BHL |
| 0,47      | 35,0            | 50,0 | 57,5 | 870           | 408          | ≤35        | 21,4                    | 7,5                 | KE5301D47_K01BHL |
| 0,56      | 35,0            | 50,0 | 57,5 | 870           | 487          | ≤35        | 22,4                    | 7,4                 | KE5301D56_K01BHL |
| 0,82      | 42,5            | 56,0 | 57,5 | 870           | 713          | ≤35        | 27,8                    | 7,0                 | KE5301D82_K01BHL |

RATED  
VOLTAGE  
3000VDC

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 0,047     | 24,5            | 27,5 | 42,5 | 3500          | 165          | 20         | 7,2                     | 16,7                | KE5401N47_K01BHL |
| 0,10      | 33,5            | 35,5 | 42,5 | 3500          | 350          | 20         | 11,8                    | 8,3                 | KE5401D10_K01BHL |
| 0,10      | 28              | 37   | 42,5 | 3500          | 350          | 20         | 11,3                    | 8,3                 | KE5401D10_K02BHL |
| 0,15      | 33              | 45   | 42,5 | 3500          | 525          | 20         | 14,8                    | 5,9                 | KE5401D15_K01BHL |
| 0,22      | 30              | 45   | 57,5 | 2000          | 440          | 35         | 15,6                    | 6,2                 | KE5401D22_K01BHL |
| 0,33      | 35              | 50   | 57,5 | 2000          | 660          | 35         | 19,8                    | 4,4                 | KE5401D33_K01BHL |
| 0,47      | 42,5            | 56   | 57,5 | 2000          | 940          | 35         | 24,5                    | 3,4                 | KE5401D47_K01BHL |

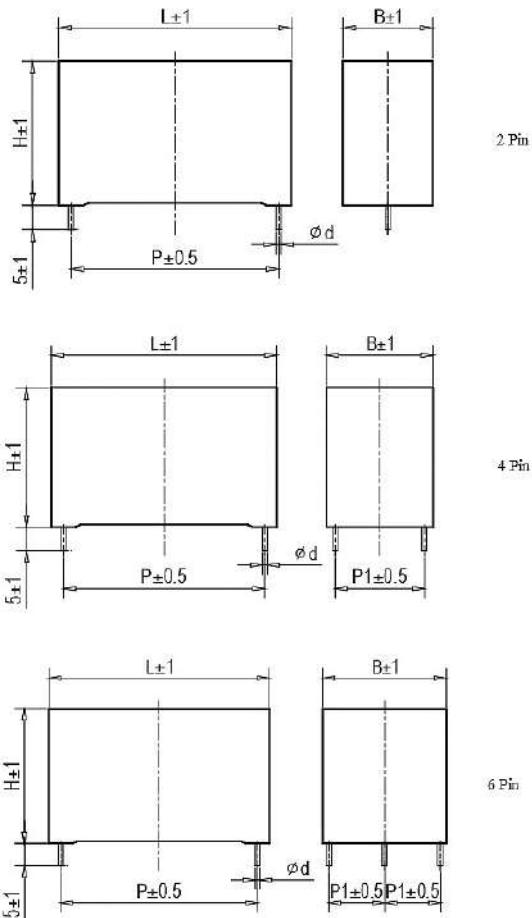
RATED  
VOLTAGE  
4000VDC

| Cap<br>µF | Dimensions (mm) |      |      | du/dt<br>V/µs | Ipeak<br>(A) | Ls<br>(nH) | Max@60°C<br>@100KHz (A) | ESR<br>@100KHz (mΩ) | PART NUMBER      |
|-----------|-----------------|------|------|---------------|--------------|------------|-------------------------|---------------------|------------------|
| 0,033     | 24,5            | 27,5 | 42,5 | 4000          | 132          | 20         | 6,3                     | 21,8                | KE5451N33_K01BHL |
| 0,068     | 33,5            | 35,5 | 42,5 | 4000          | 272          | 20         | 10,3                    | 11,0                | KE5451N68_K01BHL |
| 0,10      | 33              | 45   | 42,5 | 4000          | 400          | 20         | 12,8                    | 7,8                 | KE5451D10_K01BHL |
| 0,15      | 30              | 45   | 57,5 | 2400          | 360          | 35         | 13,9                    | 7,8                 | KE5451D15_K01BHL |
| 0,22      | 35              | 50   | 57,5 | 2400          | 528          | 35         | 17,5                    | 5,6                 | KE5451D22_K01BHL |
| 0,35      | 42,5            | 56   | 57,5 | 2400          | 840          | 35         | 22,9                    | 3,9                 | KE5451D35_K01BHL |
| 1,0       | 82              | 45   | 150  | 950           | 950          | 50         | 38,6                    | 2,0                 | KE54511D0_K01BHL |
| 1,5       | 82              | 45   | 150  | 950           | 1425         | 50         | 40,9                    | 1,7                 | KE54511D5_K01BHL |

RATED  
VOLTAGE  
4500VDC

# KE6 TYPE -40°C +105°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | IGBT surge absorption, High frequency resonance                                  |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Polypropylene film   |
| <b>Construction</b>                  | Dry construction, Non-inductive type   |
| <b>Coating</b>                       | Solvent resistant plastic case. Flammability class UL94 V-0                      |
| <b>Terminals</b>                     | Tinned red copper wire (lead-free). 2, 4 or 6 terminals                          |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +105°C  |
| <b>Capacitance</b>                   | 0.0047 to 5.6μF  |
| <b>Rated Voltage</b>                 | 700 to 3000 VDC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤6x10 <sup>-4</sup> Measured at 1KHz and 20±5°C                                  |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | Un≤1300V, 3KVAC (10s, 50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s, 50Hz)               |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## KE6 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|--------------|---------------------|---------------------|-------------------|
| 0,10      | 8,5  | 17,0 | 26,5 | 22,5 |      | 0,8 | 600           | 60           | 5,0                 | 21,3                | KE6700D102PK01BHL |
| 0,15      | 10,0 | 18,5 | 26,5 | 22,5 |      | 0,8 | 600           | 90           | 5,0                 | 16,3                | KE6700D15SPK01BHL |
| 0,22      | 11,0 | 20,0 | 26,5 | 22,5 |      | 0,8 | 600           | 132          | 5,0                 | 11,5                | KE6700D222PK01BHL |
| 0,22      | 11,0 | 20,0 | 31,0 | 27,5 |      | 1,0 | 485           | 107          | 7,9                 | 15,2                | KE6700D222PK02BHL |
| 0,33      | 13,0 | 22,0 | 31,0 | 27,5 |      | 1,0 | 485           | 160          | 7,9                 | 11,2                | KE6700D332PK01BHL |
| 0,47      | 15,0 | 24,5 | 31,0 | 27,5 |      | 1,0 | 485           | 228          | 7,9                 | 6,9                 | KE6700D472PK01BHL |
| 0,68      | 17,0 | 28,0 | 31,0 | 27,5 |      | 1,2 | 485           | 330          | 11,3                | 5,5                 | KE6700D682PK01BHL |
| 0,68      | 17,0 | 28,0 | 31,0 | 27,5 | 5,1  | 1,2 | 485           | 330          | 16,4                | 4,6                 | KE6700D68DPK01BHL |
| 0,82      | 17,0 | 28,0 | 31,0 | 27,5 | 10,2 | 1,2 | 485           | 398          | 17,5                | 4,8                 | KE6700D824PK01BHL |
| 0,82      | 15,0 | 26,0 | 42,5 | 37,5 |      | 1,2 | 325           | 267          | 11,3                | 5,1                 | KE6700D822PK01BHL |
| 1,0       | 22,0 | 31,0 | 31,0 | 27,5 |      | 1,2 | 485           | 485          | 11,3                | 4,8                 | KE67001D02PK01BHL |
| 1,0       | 22,0 | 31,0 | 31,0 | 27,5 | 10,2 | 1,2 | 485           | 485          | 20,6                | 3,9                 | KE67001D04PK01BHL |
| 1,0       | 17,0 | 28,0 | 42,5 | 37,5 |      | 1,2 | 325           | 325          | 11,3                | 4,9                 | KE67001D02PK02BHL |
| 1,5       | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 325           | 488          | 11,3                | 4,8                 | KE67001D52PK01BHL |
| 1,5       | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2 | 325           | 488          | 21,0                | 5,2                 | KE67001D54PK01BHL |
| 2,0       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 325           | 650          | 11,3                | 4,5                 | KE67002D02PK01BHL |
| 2,0       | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2 | 325           | 650          | 22,6                | 4,3                 | KE67002D04PK01BHL |
| 2,2       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 325           | 715          | 11,3                | 4,2                 | KE67002D22PK01BHL |
| 2,2       | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2 | 325           | 715          | 22,6                | 3,8                 | KE67002D24PK01BHL |
| 3,0       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 325           | 975          | 11,3                | 3,9                 | KE67003D02PK01BHL |
| 3,0       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 325           | 975          | 22,6                | 3,6                 | KE67003D04PK01BHL |
| 3,0       | 30,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 325           | 975          | 31,3                | 3,5                 | KE67003D06PK01BHL |
| 3,3       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 325           | 1073         | 11,3                | 3,8                 | KE67003D32PK01BHL |
| 3,3       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 325           | 1073         | 22,6                | 3,6                 | KE67003D34PK01BHL |
| 3,3       | 30,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 325           | 1073         | 32,1                | 3,2                 | KE67003D36PK01BHL |
| 4,0       | 33,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 325           | 1300         | 11,3                | 3,2                 | KE67004D02PK01BHL |
| 4,0       | 33,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 325           | 1300         | 22,6                | 3,1                 | KE67004D04PK01BHL |
| 4,0       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 325           | 1300         | 33,9                | 3,0                 | KE67004D06PK01BHL |
| 4,0       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 200           | 800          | 11,3                | 4,5                 | KE67004D02PK02BHL |
| 4,0       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 200           | 800          | 22,6                | 3,6                 | KE67004D04PK02BHL |
| 4,0       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 200           | 800          | 31,3                | 3,6                 | KE67004D06PK02BHL |
| 4,7       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 200           | 940          | 11,3                | 4,5                 | KE67004D72PK01BHL |
| 4,7       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 200           | 940          | 22,6                | 4,2                 | KE67004D74PK01BHL |
| 4,7       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 200           | 940          | 32,9                | 3,9                 | KE67004D76PK01BHL |
| 5,0       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 200           | 1000         | 11,3                | 4,4                 | KE67005D02PK01BHL |
| 5,0       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 200           | 1000         | 22,6                | 4,1                 | KE67005D04PK01BHL |
| 5,0       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 200           | 1000         | 33,5                | 4,1                 | KE67005D06PK01BHL |
| 5,6       | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 200           | 1120         | 11,3                | 4,1                 | KE67005D62PK01BHL |
| 5,6       | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 200           | 1120         | 22,6                | 3,8                 | KE67005D64PK01BHL |
| 5,6       | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 200           | 1120         | 33,9                | 3,6                 | KE67005D66PK01BHL |

**RATED  
VOLTAGE  
700VDC**

## KE6 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|--------------|---------------------|---------------------|-------------------|
| 0,068     | 8,5  | 17,0 | 26,5 | 22,5 |      | 0,8 | 850           | 58           | 5,0                 | 21,5                | KE6850N682PK01BHL |
| 0,10      | 10,0 | 18,5 | 26,5 | 22,5 |      | 0,8 | 850           | 85           | 5,0                 | 18,7                | KE6850D102PK01BHL |
| 0,15      | 11,0 | 20,0 | 26,5 | 22,5 |      | 0,8 | 850           | 128          | 5,0                 | 11,2                | KE6850D152PK01BHL |
| 0,15      | 11,0 | 20,0 | 31,0 | 27,5 |      | 0,8 | 700           | 105          | 5,0                 | 12,9                | KE6850D152PK02BHL |
| 0,22      | 13,0 | 22,0 | 31,0 | 27,5 |      | 1,0 | 700           | 154          | 7,9                 | 9,6                 | KE6850D222PK01BHL |
| 0,33      | 15,0 | 24,5 | 31,0 | 27,5 |      | 1,0 | 700           | 231          | 7,9                 | 7,5                 | KE6850D332PK01BHL |
| 0,47      | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,2 | 700           | 329          | 11,3                | 5,9                 | KE6850D472PK01BHL |
| 0,47      | 18,0 | 33,0 | 31,0 | 27,5 | 10,2 | 1,2 | 700           | 329          | 16,1                | 5,1                 | KE6850D474PK01BHL |
| 0,56      | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,2 | 700           | 392          | 11,3                | 4,7                 | KE6850D562PK01BHL |
| 0,56      | 18,0 | 33,0 | 31,0 | 27,5 | 10,2 | 1,2 | 700           | 392          | 17,1                | 5,6                 | KE6850D564PK01BHL |
| 0,56      | 15,0 | 26,0 | 42,5 | 37,5 |      | 1,2 | 400           | 224          | 11,3                | 5,7                 | KE6850D562PK02BHL |

**RATED  
VOLTAGE  
850VDC**

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|--------------|---------------------|---------------------|-------------------|
| 0,68      | 22,0 | 31,0 | 31,0 | 27,5 |      | 1,2 | 700           | 476          | 11,3                | 5,1                 | KE6850D682PK01BHL |
| 0,68      | 22,0 | 31,0 | 31,0 | 27,5 | 10,2 | 1,2 | 700           | 476          | 19,1                | 4,2                 | KE6850D684PK01BHL |
| 0,68      | 17,0 | 28,0 | 42,5 | 37,5 |      | 1,2 | 400           | 272          | 11,3                | 5,4                 | KE6850D682PK02BHL |
| 1,0       | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 400           | 400          | 11,3                | 5,1                 | KE68501D02PK01BHL |
| 1,0       | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2 | 400           | 400          | 19,4                | 4,1                 | KE68501D04PK01BHL |
| 1,5       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 400           | 600          | 11,3                | 4,2                 | KE68501D52PK01BHL |
| 1,5       | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2 | 400           | 600          | 22,6                | 3,4                 | KE68501D54PK01BHL |
| 2,0       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 400           | 800          | 11,3                | 3,8                 | KE68502D02PK01BHL |
| 2,0       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 400           | 800          | 22,6                | 3,2                 | KE68502D04PK01BHL |
| 2,0       | 30,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 400           | 800          | 30,0                | 3,2                 | KE68502D06PK01BHL |
| 2,2       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 400           | 880          | 11,3                | 3,8                 | KE68502D22PK01BHL |
| 2,2       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 400           | 880          | 22,6                | 3,2                 | KE68502D24PK01BHL |
| 2,2       | 30,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 400           | 880          | 30,1                | 3,2                 | KE68502D26PK01BHL |
| 2,5       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 275           | 688          | 11,3                | 4,5                 | KE68502D52PK01BHL |
| 2,5       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 275           | 688          | 22,6                | 3,5                 | KE68502D54PK01BHL |
| 2,5       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 275           | 688          | 30,1                | 3,5                 | KE68502D56PK01BHL |
| 3,0       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 275           | 825          | 11,3                | 4,1                 | KE68503D02PK01BHL |
| 3,0       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 275           | 825          | 22,6                | 3,2                 | KE68503D04PK01BHL |
| 3,0       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 275           | 825          | 30,4                | 3,2                 | KE68503D06PK01BHL |
| 3,3       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 275           | 908          | 11,3                | 4,1                 | KE68503D32PK01BHL |
| 3,3       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 275           | 908          | 22,6                | 3,2                 | KE68503D34PK01BHL |
| 3,3       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 275           | 908          | 31,3                | 3,2                 | KE68503D36PK01BHL |
| 4,0       | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 275           | 1100         | 11,3                | 3,8                 | KE68504D02PK01BHL |
| 4,0       | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 275           | 1100         | 22,6                | 3,0                 | KE68504D04PK01BHL |
| 4,0       | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 275           | 1100         | 33,9                | 2,8                 | KE68504D06PK01BHL |
| 4,7       | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 275           | 1293         | 11,3                | 3,5                 | KE68504D72PK01BHL |
| 4,7       | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 275           | 1293         | 22,6                | 2,7                 | KE68504D74PK01BHL |
| 4,7       | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 275           | 1293         | 33,9                | 2,5                 | KE68504D76PK01BHL |

**RATED  
VOLTAGE  
850VDC**

## KE6 TYPE STANDARD RATINGS

| Cap.<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz<br>(A) | ESR<br>@100KHz<br>(mΩ) | PART NUMBER       |
|------------|------|------|------|------|------|-----|---------------|--------------|----------------------------|------------------------|-------------------|
| 0,033      | 7,0  | 16,0 | 26,5 | 22,5 |      | 0,8 | 1300          | 43           | 4,0                        | 33,8                   | KE6121N332PK01BHL |
| 0,047      | 8,5  | 17,0 | 26,5 | 22,5 |      | 0,8 | 1300          | 61           | 5,0                        | 26,5                   | KE6121N472PK01BHL |
| 0,068      | 10,0 | 18,5 | 26,5 | 22,5 |      | 0,8 | 1300          | 88           | 5,0                        | 22,4                   | KE6121N682PK01BHL |
| 0,068      | 9,0  | 18,0 | 31,0 | 27,5 |      | 0,8 | 1100          | 75           | 5,0                        | 21,5                   | KE6121N682PK02BHL |
| 0,10       | 12,0 | 22,0 | 26,5 | 22,5 |      | 0,8 | 1300          | 130          | 5,0                        | 14,6                   | KE6121D102PK01BHL |
| 0,10       | 11,0 | 20,0 | 31,0 | 27,5 |      | 0,8 | 1100          | 110          | 5,0                        | 15,8                   | KE6121D102PK02BHL |
| 0,15       | 13,0 | 22,0 | 31,0 | 27,5 |      | 1,0 | 1100          | 165          | 7,9                        | 12,5                   | KE6121D152PK01BHL |
| 0,22       | 15,0 | 24,5 | 31,0 | 27,5 |      | 1,0 | 1100          | 242          | 7,9                        | 12,5                   | KE6121D222PK01BHL |
| 0,33       | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,2 | 1100          | 363          | 11,3                       | 6,5                    | KE6121D332PK01BHL |
| 0,33       | 18,0 | 33,0 | 31,0 | 27,5 | 10,2 | 1,2 | 1100          | 363          | 15,2                       | 5,6                    | KE6121D334PK01BHL |
| 0,33       | 15,0 | 26,0 | 42,5 | 37,5 |      | 1,2 | 650           | 215          | 11,3                       | 8,3                    | KE6121D332PK02BHL |
| 0,47       | 22,0 | 31,0 | 31,0 | 27,5 |      | 1,2 | 1100          | 517          | 11,3                       | 5,1                    | KE6121D472PK01BHL |
| 0,47       | 22,0 | 31,0 | 31,0 | 27,5 | 10,2 | 1,2 | 1100          | 517          | 17,8                       | 4,2                    | KE6121D474PK01BHL |
| 0,47       | 17,0 | 28,0 | 42,5 | 37,5 |      | 1,2 | 650           | 306          | 11,3                       | 7,2                    | KE6121D472PK02BHL |
| 0,68       | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 650           | 442          | 11,3                       | 5,9                    | KE6121D682PK01BHL |
| 0,68       | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2 | 650           | 442          | 18,1                       | 5,2                    | KE6121D684PK01BHL |
| 1,0        | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 650           | 650          | 11,3                       | 5,2                    | KE61211D02PK01BHL |
| 1,0        | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2 | 650           | 650          | 22,6                       | 4,3                    | KE61211D04PK01BHL |
| 1,2        | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 650           | 780          | 11,3                       | 5,1                    | KE61211D22PK01BHL |
| 1,2        | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2 | 650           | 780          | 22,6                       | 3,8                    | KE61211D24PK01BHL |
| 1,5        | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 650           | 975          | 11,3                       | 4,2                    | KE61211D52PK01BHL |
| 1,5        | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 650           | 975          | 22,6                       | 3,2                    | KE61211D54PK01BHL |
| 1,5        | 30,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 650           | 975          | 28,6                       | 3,2                    | KE61211D56PK01BHL |

**RATED  
VOLTAGE  
1200VDC**

| Cap.<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz<br>(A) | ESR<br>@100KHz<br>(mΩ) | PART NUMBER       |
|------------|------|------|------|------|------|-----|---------------|--------------|----------------------------|------------------------|-------------------|
| 2,0        | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 350,0         | 700          | 11,3                       | 4,5                    | KE61212D02PK01BHL |
| 2,0        | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 350,0         | 700          | 22,6                       | 3,6                    | KE61212D04PK01BHL |
| 2,0        | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 350,0         | 700          | 29,2                       | 3,6                    | KE61212D06PK01BHL |
| 2,2        | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 350,0         | 770          | 11,3                       | 4,5                    | KE61212D22PK01BHL |
| 2,2        | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 350,0         | 770          | 22,6                       | 3,5                    | KE61212D24PK01BHL |
| 2,2        | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 350,0         | 770          | 29,6                       | 3,5                    | KE61212D26PK01BHL |
| 2,5        | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 350,0         | 875          | 11,3                       | 4,1                    | KE61212D52PK01BHL |
| 2,5        | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 350,0         | 875          | 22,6                       | 3,2                    | KE61212D54PK01BHL |
| 2,5        | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 350,0         | 875          | 33,6                       | 3,2                    | KE61212D56PK01BHL |
| 3,0        | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 350,0         | 1050         | 11,3                       | 3,5                    | KE61213D02PK01BHL |
| 3,0        | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 350,0         | 1050         | 22,6                       | 3,2                    | KE61213D04PK01BHL |
| 3,0        | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 350,0         | 1050         | 33,9                       | 3,2                    | KE61213D06PK01BHL |

**RATED  
VOLTAGE  
1200VDC**

## KE6 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|--------------|---------------------|---------------------|-------------------|
| 0,022     | 7,0  | 16,0 | 26,5 | 22,5 |      | 0,8 | 1500          | 33           | 3,4                 | 44,5                | KE6151N222PK01BHL |
| 0,033     | 8,5  | 17,0 | 26,5 | 22,5 |      | 0,8 | 1500          | 50           | 4,3                 | 33,0                | KE6151N332PK01BHL |
| 0,047     | 10,0 | 18,5 | 26,5 | 22,5 |      | 0,8 | 1500          | 71           | 5,0                 | 24,8                | KE6151N472PK01BHL |
| 0,047     | 9,0  | 18,0 | 31,0 | 27,5 |      | 0,8 | 1225          | 58           | 5,0                 | 27,3                | KE6151N472PK02BHL |
| 0,068     | 12,0 | 22,0 | 26,5 | 22,5 |      | 0,8 | 1500          | 102          | 5,0                 | 19,5                | KE6151N682PK01BHL |
| 0,068     | 11,0 | 20,0 | 31,0 | 27,5 |      | 0,8 | 1225          | 83           | 5,0                 | 20,7                | KE6151N682PK02BHL |
| 0,10      | 13,0 | 22,0 | 31,0 | 27,5 |      | 0,8 | 1225          | 123          | 5,0                 | 15,3                | KE6151D102PK01BHL |
| 0,15      | 17,0 | 28,0 | 31,0 | 27,5 |      | 1,0 | 1225          | 184          | 7,9                 | 10,6                | KE6151D152PK01BHL |
| 0,22      | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,2 | 1225          | 270          | 11,3                | 7,6                 | KE6151D222PK01BHL |
| 0,22      | 17,0 | 28,0 | 42,5 | 37,5 |      | 1,2 | 800           | 176          | 11,3                | 10,2                | KE6151D222PK02BHL |
| 0,33      | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 800           | 264          | 11,3                | 6,2                 | KE6151D332PK01BHL |
| 0,33      | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2 | 800           | 264          | 15,2                | 5,1                 | KE6151D334PK01BHL |
| 0,39      | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 800           | 312          | 11,3                | 6,2                 | KE6151D392PK01BHL |
| 0,39      | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2 | 800           | 312          | 16,3                | 4,6                 | KE6151D394PK01BHL |
| 0,47      | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 800           | 376          | 11,3                | 6,6                 | KE6151D472PK01BHL |
| 0,47      | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2 | 800           | 376          | 20,7                | 5,7                 | KE6151D474PK01BHL |
| 0,68      | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 800           | 544          | 11,3                | 5,7                 | KE6151D682PK01BHL |
| 0,68      | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2 | 800           | 544          | 22,2                | 4,8                 | KE6151D684PK01BHL |
| 1,0       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 800           | 800          | 11,3                | 4,8                 | KE61511D02PK01BHL |
| 1,0       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 800           | 800          | 22,6                | 3,9                 | KE61511D04PK01BHL |
| 1,2       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 500           | 600          | 11,3                | 5,3                 | KE61511D22PK01BHL |
| 1,2       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 500           | 600          | 22,6                | 4,5                 | KE61511D24PK01BHL |
| 1,2       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 500           | 600          | 26,7                | 4,5                 | KE61511D26PK01BHL |
| 1,5       | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 500           | 750          | 11,3                | 4,8                 | KE61511D52PK01BHL |
| 1,5       | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 500           | 750          | 22,6                | 4,1                 | KE61511D54PK01BHL |
| 1,5       | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 500           | 750          | 30,9                | 4,1                 | KE61511D56PK01BHL |
| 1,8       | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 500           | 900          | 11,3                | 4,5                 | KE61511D82PK01BHL |
| 1,8       | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 500           | 900          | 22,6                | 3,6                 | KE61511D84PK01BHL |
| 1,8       | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 500           | 900          | 32,3                | 3,6                 | KE61511D86PK01BHL |

**RATED  
VOLTAGE  
1500VDC**

| Cap<br>µF | B    | H    | L    | P    | P1 | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|----|-----|---------------|--------------|---------------------|---------------------|-------------------|
| 0,015     | 7,0  | 16,0 | 26,5 | 22,5 |    | 0,8 | 2150          | 32           | 3,0                 | 56,2                | KE6201N152PK01BHL |
| 0,022     | 8,5  | 17,0 | 26,5 | 22,5 |    | 0,8 | 2150          | 47           | 3,8                 | 40,5                | KE6201N222PK01BHL |
| 0,033     | 11,0 | 20,0 | 26,5 | 22,5 |    | 0,8 | 2150          | 71           | 5,0                 | 31,5                | KE6201N332PK01BHL |
| 0,033     | 11,0 | 20,0 | 31,0 | 27,5 |    | 0,8 | 1750          | 58           | 4,9                 | 35,5                | KE6201N222PK02BHL |
| 0,047     | 12,0 | 22,0 | 26,5 | 22,5 |    | 0,8 | 2150          | 101          | 5,0                 | 22,5                | KE6201N472PK01BHL |
| 0,047     | 11,0 | 20,0 | 31,0 | 27,5 |    | 0,8 | 1750          | 82           | 5,0                 | 25,2                | KE6201N472PK02BHL |
| 0,068     | 13,0 | 22,0 | 31,0 | 27,5 |    | 0,8 | 1750          | 119          | 5,0                 | 18,2                | KE6201N682PK01BHL |

**RATED  
VOLTAGE  
2000VDC**

## KE6 TYPE STANDARD RATINGS

| Cap.<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz<br>(A) | ESR<br>@100KHz<br>(mΩ) | PART NUMBER       |
|------------|------|------|------|------|------|-----|---------------|--------------|----------------------------|------------------------|-------------------|
| 0,10       | 17,0 | 28,0 | 31,0 | 27,5 |      | 1,0 | 1750          | 175          | 7,9                        | 15,7                   | KE6201D102PK01BHL |
| 0,15       | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,2 | 1750          | 263          | 11,3                       | 12,5                   | KE6201D152PK01BHL |
| 0,15       | 18,0 | 33,0 | 31,0 | 27,5 | 10,2 | 1,2 | 1750          | 263          | 12,4                       | 10,5                   | KE6201D154PK01BHL |
| 0,15       | 15,0 | 26,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 150          | 10,1                       | 15,8                   | KE6201D152PK02BHL |
| 0,22       | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 220          | 11,3                       | 7,8                    | KE6201D222PK01BHL |
| 0,33       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 330          | 11,3                       | 7,2                    | KE6201D332PK01BHL |
| 0,33       | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1000          | 330          | 18,0                       | 4,6                    | KE6201D334PK01BHL |
| 0,39       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 390          | 11,3                       | 7,1                    | KE6201D392PK01BHL |
| 0,39       | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2 | 1000          | 390          | 19,2                       | 4,5                    | KE6201D394PK01BHL |
| 0,47       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 470          | 11,3                       | 6,2                    | KE6201D472PK01BHL |
| 0,47       | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2 | 1000          | 470          | 20,7                       | 5,1                    | KE6201D474PK01BHL |
| 0,56       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 560          | 11,3                       | 5,6                    | KE6201D562PK01BHL |
| 0,56       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 1000          | 560          | 22,6                       | 4,6                    | KE6201D564PK01BHL |
| 0,56       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1000          | 560          | 24,9                       | 4,6                    | KE6201D566PK01BHL |
| 0,68       | 33,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 1000          | 680          | 11,3                       | 5,6                    | KE6201D682PK01BHL |
| 0,68       | 33,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 1000          | 680          | 22,6                       | 4,6                    | KE6201D684PK01BHL |
| 0,68       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1000          | 680          | 26,0                       | 4,5                    | KE6201D686PK01BHL |
| 0,68       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 580           | 394          | 11,3                       | 6,5                    | KE6201D682PK02BHL |
| 0,68       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 580           | 394          | 22,6                       | 5,4                    | KE6201D684PK02BHL |
| 0,68       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 580           | 394          | 23,4                       | 5,4                    | KE6201D686PK02BHL |
| 0,82       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 580           | 476          | 11,3                       | 5,9                    | KE6201D822PK01BHL |
| 0,82       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 580           | 476          | 22,6                       | 4,8                    | KE6201D684PK01BHL |
| 0,82       | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 580           | 476          | 24,6                       | 4,6                    | KE6201D826PK01BHL |
| 1          | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 580           | 580          | 11,3                       | 5,4                    | KE62011D04PK01BHL |
| 1          | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 580           | 580          | 22,6                       | 4,5                    | KE62011D04PK01BHL |
| 1          | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 580           | 580          | 28,6                       | 4,5                    | KE62011D06PK01BHL |
| 1,2        | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 580           | 696          | 11,3                       | 4,8                    | KE62011D22PK01BHL |
| 1,2        | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 580           | 696          | 22,6                       | 3,7                    | KE62011D24PK01BHL |
| 1,2        | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 580           | 696          | 30,2                       | 3,7                    | KE62011D26PK01BHL |

**RATED  
VOLTAGE  
2000VDC**

## KE6 TYPE STANDARD RATINGS

| Cap<br>µF | B    | H    | L    | P    | P1   | d    | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|------|---------------|--------------|---------------------|---------------------|-------------------|
| 0,0068    | 7,0  | 16,0 | 26,5 | 22,5 |      | 0,8  | 2650          | 18           | 2,2                 | 102                 | KE6251N682PK01BHL |
| 0,01      | 8,5  | 17,0 | 26,5 | 22,5 |      | 0,8  | 2650          | 27           | 2,8                 | 76,5                | KE6251N102PK01BHL |
| 0,015     | 10,0 | 18,5 | 26,5 | 22,5 |      | 0,8  | 2650          | 40           | 3,6                 | 54,0                | KE6251N152PK01BHL |
| 0,022     | 12,0 | 22,0 | 26,5 | 22,5 |      | 0,8  | 2650          | 58           | 4,6                 | 39,8                | KE6251N222PK01BHL |
| 0,022     | 11,0 | 20,0 | 31,0 | 27,5 |      | 0,8  | 2150          | 47           | 4,3                 | 45,7                | KE6251N222PK02BHL |
| 0,033     | 11,0 | 20,0 | 31,0 | 27,5 |      | 0,8  | 2150          | 71           | 5,0                 | 33,8                | KE6251N332PK01BHL |
| 0,047     | 13,0 | 22,0 | 31,0 | 27,5 |      | 0,8  | 2150          | 101          | 5,0                 | 25,0                | KE6251N472PK01BHL |
| 0,068     | 17,0 | 28,0 | 31,0 | 27,5 |      | 1,00 | 2150          | 146          | 7,9                 | 17,3                | KE6251N682PK02BHL |
| 0,1       | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,2  | 2150          | 215          | 10,8                | 11,5                | KE6251D102PK01BHL |
| 0,1       | 18,0 | 33,0 | 31,0 | 27,5 | 10,2 | 1,2  | 2150          | 215          | 10,8                | 11,5                | KE6251D104PK01BHL |
| 0,1       | 15,0 | 26,0 | 42,5 | 37,5 |      | 1,2  | 1350          | 135          | 8,9                 | 17,5                | KE6251D102PK02BHL |
| 0,15      | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2  | 1350          | 203          | 11,3                | 11,5                | KE6251D152PK01BHL |
| 0,15      | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2  | 1350          | 203          | 12,2                | 9,8                 | KE6251D154PK01BHL |
| 0,22      | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2  | 1350          | 297          | 11,3                | 8,7                 | KE6251D222PK01BHL |
| 0,22      | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2  | 1350          | 297          | 17,1                | 7,8                 | KE6251D224PK01BHL |
| 0,33      | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2  | 1350          | 446          | 11,3                | 6,5                 | KE6251D332PK01BHL |
| 0,33      | 28,0 | 37,0 | 42,5 | 37,5 | 20,3 | 1,2  | 1350          | 446          | 19,0                | 5,9                 | KE6251D334PK01BHL |
| 0,39      | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2  | 1350          | 527          | 11,3                | 5,8                 | KE6251D392PK01BHL |
| 0,39      | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2  | 1350          | 527          | 21,7                | 5,6                 | KE6251D394PK01BHL |
| 0,39      | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2  | 1350          | 527          | 22,8                | 5,6                 | KE6251D396PK01BHL |
| 0,47      | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2  | 1350          | 635          | 23,9                | 5,3                 | KE6251D476PK01BHL |
| 0,47      | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2  | 750           | 353          | 11,3                | 6,5                 | KE6251D474PK01BHL |
| 0,47      | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2  | 750           | 353          | 22,6                | 5,8                 | KE6251D474PK01BHL |

**RATED  
VOLTAGE  
2500VDC**

| Cap<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz | ESR<br>@100KHz (mΩ) | PART NUMBER       |
|-----------|------|------|------|------|------|-----|---------------|--------------|---------------------|---------------------|-------------------|
| 0,56      | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 750           | 420          | 11,3                | 6,5                 | KE6251D562PK01BHL |
| 0,56      | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 750           | 420          | 22,6                | 5,4                 | KE6251D564PK01BHL |
| 0,56      | 30,0 | 45,0 | 57,5 | 52,5 | 10,2 | 1,2 | 750           | 420          | 26,6                | 5,4                 | KE6251D566PK01BHL |
| 0,68      | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 750           | 510          | 11,3                | 6,2                 | KE6251D682PK01BHL |
| 0,68      | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 750           | 510          | 22,6                | 5,1                 | KE6251D684PK01BHL |
| 0,68      | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 750           | 510          | 30,5                | 5,1                 | KE6251D686PK01BHL |
| 0,82      | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 750           | 615          | 11,3                | 5,6                 | KE6251D822PK01BHL |
| 0,82      | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 750           | 615          | 22,6                | 4,5                 | KE6251D824PK01BHL |
| 0,82      | 35,0 | 50,0 | 57,5 | 52,5 | 10,2 | 1,2 | 750           | 615          | 31,7                | 4,2                 | KE6251D826PK01BHL |

**RATED  
VOLTAGE  
2500VDC**

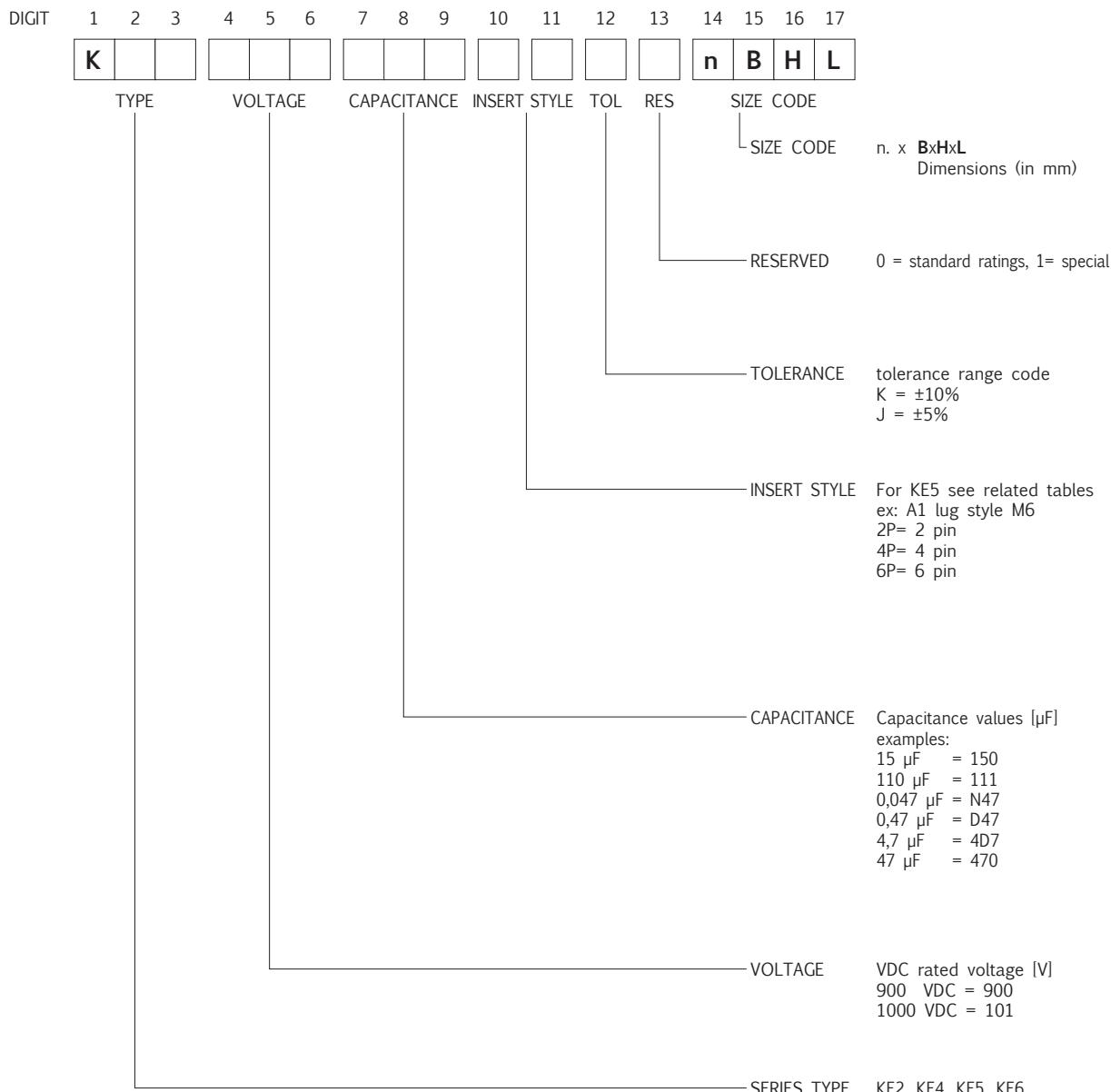
## KE6 TYPE STANDARD RATINGS

| Cap.<br>µF | B    | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | Max@60°C<br>@100KHz<br>(A) | ESR<br>@100KHz<br>(mΩ) | PART NUMBER       |
|------------|------|------|------|------|------|-----|---------------|--------------|----------------------------|------------------------|-------------------|
| 0,0047     | 7,0  | 16,0 | 26,5 | 22,5 |      | 0,8 | 3400          | 16           | 1,9                        | 130,5                  | KE6301N472PK01BHL |
| 0,01       | 11,0 | 20,0 | 26,5 | 22,5 |      | 0,8 | 3400          | 34           | 3,1                        | 68,5                   | KE6301N102PK01BHL |
| 0,01       | 9,0  | 18,0 | 31,0 | 27,5 |      | 0,8 | 2750          | 28           | 2,9                        | 81,5                   | KE6301N102PK02BHL |
| 0,022      | 12,0 | 22,0 | 26,5 | 22,5 |      | 0,8 | 3400          | 75           | 4,7                        | 49,5                   | KE6301N222PK01BHL |
| 0,022      | 11,0 | 20,0 | 31,0 | 27,5 |      | 0,8 | 2750          | 61           | 4,4                        | 57,5                   | KE6301N222PK02BHL |
| 0,022      | 13,0 | 22,0 | 31,0 | 27,5 |      | 0,8 | 2750          | 61           | 4,8                        | 39,7                   | KE6301N222PK03BHL |
| 0,033      | 15,0 | 24,5 | 31,0 | 27,5 |      | 0,8 | 2750          | 91           | 5,0                        | 28,5                   | KE6301N332PK01BHL |
| 0,047      | 18,0 | 33,0 | 31,0 | 27,5 |      | 1,0 | 2750          | 129          | 7,9                        | 20,7                   | KE6301N472PK02BHL |
| 0,1        | 22,0 | 30,0 | 42,5 | 37,5 |      | 1,2 | 1600          | 160          | 10,9                       | 14,5                   | KE6301D102PK01BHL |
| 0,1        | 22,0 | 30,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 160          | 11,2                       | 13,5                   | KE6301D104PK01BHL |
| 0,15       | 28,0 | 37,0 | 42,5 | 37,5 |      | 1,2 | 1600          | 240          | 11,3                       | 10,2                   | KE6301D152PK01BHL |
| 0,15       | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 240          | 15,1                       | 9,5                    | KE6301D154PK01BHL |
| 0,18       | 28,0 | 37,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 288          | 15,8                       | 8,7                    | KE6301D184PK01BHL |
| 0,22       | 30,0 | 45,0 | 42,5 | 37,5 |      | 1,2 | 1600          | 352          | 11,3                       | 8,7                    | KE6301D222PK01BHL |
| 0,22       | 30,0 | 45,0 | 42,5 | 37,5 | 20,3 | 1,2 | 1600          | 352          | 18,7                       | 7,1                    | KE6301D224PK01BHL |
| 0,22       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 352          | 21,8                       | 9,2                    | KE6301D226PK01BHL |
| 0,24       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 384          | 19,6                       | 8,7                    | KE6301D246PK01BHL |
| 0,27       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 432          | 20,5                       | 8,6                    | KE6301D276PK01BHL |
| 0,33       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 528          | 22,2                       | 8,0                    | KE6301D336PK01BHL |
| 0,33       | 30,0 | 45,0 | 57,5 | 52,5 |      | 1,2 | 875           | 287          | 11,3                       | 8,6                    | KE6301D332PK01BHL |
| 0,33       | 30,0 | 45,0 | 57,5 | 52,5 | 20,3 | 1,2 | 875           | 287          | 22,6                       | 9,0                    | KE6301D334PK01BHL |
| 0,35       | 33,0 | 45,0 | 42,5 | 37,5 | 10,2 | 1,2 | 1600          | 560          | 22,4                       | 5,2                    | KE6301D356PK01BHL |
| 0,47       | 35,0 | 50,0 | 57,5 | 52,5 |      | 1,2 | 875           | 409          | 11,3                       | 7,3                    | KE6301D472PK01BHL |
| 0,47       | 35,0 | 50,0 | 57,5 | 52,5 | 20,3 | 1,2 | 875           | 409          | 22,6                       | 5,7                    | KE6301D474PK01BHL |

**RATED  
VOLTAGE  
3000VDC**

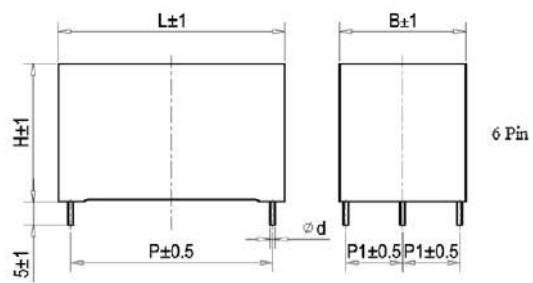
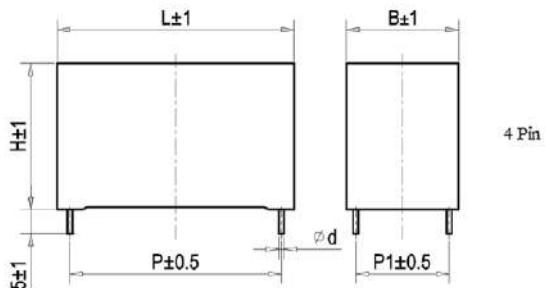
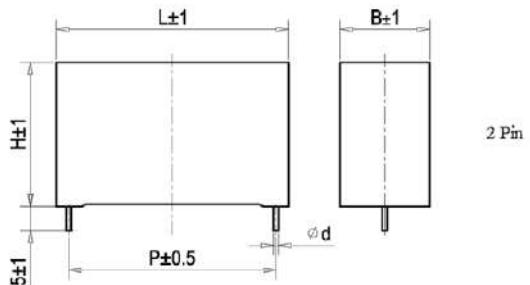
## PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS

New PART-NUMBER CODE in use since Sep 2010. Total length is 17 digits.  
Please see examples below and have a reference code from the standard ratings capacitors pages.



## KE9 TYPE -40°C +105°C 100000H

|                                    |  |
|------------------------------------|--|
| <b>Applications</b>                | Inverter, Motor drive, Switch power supply, AC filter                            |
| <b>Reference Standard</b>          | IEC 61071  |
| <b>Dielectric</b>                  | Metallized Polypropylene film  |
| <b>Construction</b>                | film plastic case package, resin filled (UL94 V-0)                               |
| <b>Operating temperature range</b> | -40 to +105°C  |
| <b>Capacitance</b>                 | 0.10 to 40μF   |
| <b>Rated Voltage</b>               | 330 to 850 VDC (200 to 450 VAC)  |
| <b>Tolerance</b>                   | ±5%, ±10%  |
| <b>Dissipation factor</b>          | ≤10x10 <sup>-4</sup> Measured at 100 Hz and 20±5°C                               |
| <b>Life expectancy</b>             | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <b>Dielectric strength</b>         | 1.5Un (DC) applied to 10s at 20±5°C Test   |
| <b>Voltage terminal to case</b>    | Un≤1300V, 3KVAC (10s,50Hz)<br>Un>1300V, 1.5Un+1000VAC (10s,50Hz)                 |
| <b>Insulation resistance</b>       | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## KE9 TYPE STANDARD RATINGS

| Cap<br>µF | B   | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz(A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|-----|------|------|------|------|-----|---------------|--------------|------------------------|--------------------|-------------------|
| 0,68      | 8,5 | 17   | 26,5 | 22,5 |      | 0,8 | 60            | 41           | 4                      | 33,8               | KE9330D682PK00BHL |
| 1         | 10  | 18,5 | 26,5 | 22,5 |      | 0,8 | 60            | 60           | 5                      | 25                 | KE93301D02PK00BHL |
| 1,5       | 12  | 22   | 26,5 | 22,5 |      | 0,8 | 60            | 90           | 5                      | 18,4               | KE93301D52PK00BHL |
| 1,5       | 11  | 20   | 31   | 27,5 |      | 0,8 | 45            | 68           | 5                      | 24                 | KE93301D52PK01BHL |
| 2         | 13  | 22   | 31   | 27,5 |      | 1   | 45            | 90           | 7                      | 18                 | KE93302D02PK00BHL |
| 2,2       | 13  | 22   | 31   | 27,5 |      | 1   | 45            | 99           | 7                      | 16,7               | KE93302D22PK00BHL |
| 2,5       | 13  | 22   | 31   | 27,5 |      | 1   | 45            | 113          | 8                      | 15,1               | KE93302D52PK00BHL |
| 3         | 15  | 24,5 | 31   | 27,5 |      | 1   | 45            | 135          | 8                      | 13,1               | KE93303D02PK00BHL |
| 3,3       | 15  | 24,5 | 31   | 27,5 |      | 1   | 45            | 149          | 8                      | 12,2               | KE93303D32PK00BHL |
| 4,7       | 18  | 33   | 31   | 27,5 |      | 1,2 | 45            | 212          | 11                     | 8,6                | KE93304D72PK00BHL |
| 4,7       | 18  | 33   | 31   | 27,5 | 5,1  | 1,2 | 45            | 212          | 13                     | 7,8                | KE93304D74PK01BHL |
| 5         | 18  | 33   | 31   | 27,5 |      | 1,2 | 45            | 225          | 11                     | 8,2                | KE93305D02PK00BHL |
| 5         | 18  | 33   | 31   | 27,5 | 5,1  | 1,2 | 45            | 225          | 13                     | 7,4                | KE93305D04PK01BHL |
| 6,8       | 22  | 31   | 31   | 27,5 |      | 1,2 | 45            | 306          | 11                     | 6,6                | KE93306D82PK00BHL |
| 6,8       | 22  | 31   | 31   | 27,5 | 10,2 | 1,2 | 45            | 306          | 15                     | 5,7                | KE93306D84PK01BHL |
| 6,8       | 17  | 28   | 42,5 | 37,5 |      | 1,2 | 30            | 204          | 11                     | 10,2               | KE93306D82PK02BHL |
| 15        | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 30            | 450          | 11                     | 5,6                | KE93301502PK00BHL |
| 15        | 28  | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 30            | 450          | 21                     | 4,8                | KE93301504PK01BHL |
| 20        | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 30            | 600          | 11                     | 4,7                | KE93302002PK00BHL |
| 20        | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 30            | 600          | 23                     | 3,8                | KE93302004PK01BHL |
| 25        | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 17            | 425          | 11                     | 6,2                | KE93302502PK00BHL |
| 25        | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 17            | 425          | 23                     | 5,4                | KE93302504PK01BHL |
| 30        | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 17            | 510          | 11                     | 5,5                | KE93303002PK00BHL |
| 30        | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 17            | 510          | 23                     | 4,6                | KE93303004PK01BHL |
| 30        | 30  | 45   | 57,5 | 52,5 | 10,2 | 1,2 | 17            | 510          | 26                     | 4,3                | KE93303006PK02BHL |
| 33        | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 17            | 561          | 11                     | 5,1                | KE93303302PK00BHL |
| 33        | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 17            | 561          | 23                     | 4,3                | KE93303304PK01BHL |
| 33        | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 17            | 561          | 29                     | 4                  | KE93303306PK02BHL |
| 35        | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 17            | 595          | 11                     | 4,9                | KE93303502PK00BHL |
| 35        | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 17            | 595          | 23                     | 4,1                | KE93303504PK01BHL |
| 35        | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 17            | 595          | 30                     | 3,8                | KE93303506PK02BHL |
| 40        | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 17            | 680          | 11                     | 4,5                | KE93304002PK00BHL |
| 40        | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 17            | 680          | 23                     | 3,7                | KE93304004PK01BHL |
| 40        | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 17            | 680          | 32                     | 3,4                | KE93304006PK02BHL |

Un 330VDC  
Urms 200VAC  
Us 495V

## KE9 TYPE STANDARD RATINGS

| Cap<br>µF | B   | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz(A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|-----|------|------|------|------|-----|---------------|--------------|------------------------|--------------------|-------------------|
| 0,47      | 8,5 | 17   | 26,5 | 22,5 |      | 0,8 | 73            | 34           | 4                      | 41,3               | KE94004D72PK00BHL |
| 0,68      | 10  | 18,5 | 26,5 | 22,5 |      | 0,8 | 73            | 50           | 5                      | 30,7               | KE94006D82PK00BHL |
| 0,68      | 9   | 18   | 31   | 27,5 |      | 0,8 | 55            | 37           | 4                      | 40,2               | KE94006D82PK01BHL |
| 1         | 12  | 22   | 26,5 | 22,5 |      | 0,8 | 73            | 73           | 5                      | 22,7               | KE94001D02PK00BHL |
| 1         | 11  | 20   | 31   | 27,5 |      | 0,8 | 55            | 55           | 5                      | 29,6               | KE94001D02PK01BHL |
| 1,5       | 13  | 22   | 31   | 27,5 |      | 1   | 55            | 83           | 7                      | 20,2               | KE94001D52PK00BHL |
| 2         | 15  | 24,5 | 31   | 27,5 |      | 1   | 55            | 110          | 8                      | 16                 | KE94002D02PK00BHL |
| 2,2       | 15  | 24,5 | 31   | 27,5 |      | 1   | 55            | 121          | 8                      | 14,9               | KE94002D22PK00BHL |
| 2,5       | 17  | 28   | 31   | 27,5 |      | 1   | 55            | 138          | 8                      | 13,4               | KE94002D52PK00BHL |
| 3         | 17  | 28   | 31   | 27,5 |      | 1,2 | 55            | 165          | 10                     | 10,9               | KE94003D02PK00BHL |
| 3         | 17  | 28   | 31   | 27,5 | 5,1  | 1,2 | 55            | 165          | 11                     | 10,1               | KE94003D04PK01BHL |
| 3,3       | 18  | 33   | 31   | 27,5 |      | 1,2 | 55            | 182          | 11                     | 10,1               | KE94003D32PK00BHL |
| 3,3       | 18  | 33   | 31   | 27,5 | 5,1  | 1,2 | 55            | 182          | 12                     | 9,3                | KE94003D34PK01BHL |
| 4         | 18  | 33   | 31   | 27,5 |      | 1,2 | 55            | 220          | 11                     | 8,7                | KE94004D02PK00BHL |
| 4         | 18  | 33   | 31   | 27,5 | 10,2 | 1,2 | 55            | 220          | 13                     | 7,9                | KE94004D04PK01BHL |
| 4,7       | 22  | 31   | 31   | 27,5 |      | 1,2 | 55            | 259          | 11                     | 7,7                | KE94004D72PK00BHL |
| 4,7       | 22  | 31   | 31   | 27,5 | 10,2 | 1,2 | 55            | 259          | 14                     | 6,9                | KE94004D74PK01BHL |
| 4,7       | 17  | 28   | 42,5 | 37,5 |      | 1,2 | 40            | 188          | 10                     | 13,7               | KE94004D72PK02BHL |
| 5         | 18  | 31,5 | 42,5 | 37,5 |      | 1,2 | 40            | 200          | 11                     | 11,4               | KE94005D02PK00BHL |
| 6,8       | 22  | 30   | 42,5 | 37,5 |      | 1,2 | 40            | 272          | 11                     | 10,2               | KE94006D82PK00BHL |
| 6,8       | 22  | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 40            | 272          | 14                     | 9,3                | KE94006D84PK01BHL |
| 10        | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 40            | 400          | 11                     | 6,7                | KE94001002PK00BHL |
| 10        | 28  | 37   | 42,5 | 37,5 | 20,3 | 1,2 | 40            | 400          | 19                     | 5,8                | KE94001004PK01BHL |
| 10        | 28  | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 40            | 400          | 20                     | 5,6                | KE94001006PK02BHL |
| 15        | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 40            | 600          | 11                     | 5                  | KE94001502PK00BHL |
| 15        | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 40            | 600          | 23                     | 4,2                | KE94001504PK01BHL |
| 15        | 30  | 45   | 42,5 | 37,5 | 10,2 | 1,2 | 40            | 600          | 25                     | 3,9                | KE94001506PK02BHL |
| 20        | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 20            | 400          | 11                     | 6,4                | KE94002002PK00BHL |
| 20        | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 400          | 23                     | 5,6                | KE94002004PK01BHL |
| 20        | 30  | 45   | 57,5 | 52,5 | 10,2 | 1,2 | 20            | 400          | 24                     | 5,3                | KE94002006PK02BHL |
| 22        | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 20            | 440          | 11                     | 6                  | KE94002202PK00BHL |
| 22        | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 440          | 23                     | 5,2                | KE94002204PK01BHL |
| 22        | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 20            | 440          | 27                     | 4,9                | KE94002206PK02BHL |
| 25        | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 20            | 500          | 11                     | 5,5                | KE94002502PK00BHL |
| 25        | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 20            | 500          | 23                     | 4,6                | KE94002504PK01BHL |
| 25        | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 20            | 500          | 28                     | 4,4                | KE94002506PK02BHL |

Un 400VDC  
Urms 250VAC  
Us 600V

## KE9 TYPE STANDARD RATINGS

| Cap<br>µF | B   | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz(A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|-----|------|------|------|------|-----|---------------|--------------|------------------------|--------------------|-------------------|
| 0,22      | 8,5 | 17   | 26,5 | 22,5 |      | 0,8 | 95            | 21           | 3                      | 67,3               | KE9600D222PK00BHL |
| 0,33      | 10  | 18,5 | 26,5 | 22,5 |      | 0,8 | 95            | 31           | 4                      | 48                 | KE9600D332PK00BHL |
| 0,47      | 11  | 20   | 26,5 | 22,5 |      | 0,8 | 95            | 45           | 4                      | 36,4               | KE9600D472PK00BHL |
| 0,68      | 11  | 20   | 31   | 27,5 |      | 0,8 | 75            | 51           | 5                      | 34,9               | KE9600D682PK00BHL |
| 1         | 15  | 24,5 | 31   | 27,5 |      | 1   | 75            | 75           | 6                      | 24,2               | KE96001D02PK00BHL |
| 1,5       | 18  | 33   | 31   | 27,5 |      | 1,2 | 75            | 113          | 9                      | 16,5               | KE96001D52PK00BHL |
| 2         | 18  | 33   | 31   | 27,5 |      | 1,2 | 75            | 150          | 10                     | 13                 | KE96002D02PK00BHL |
| 2         | 18  | 33   | 31   | 27,5 | 10,2 | 1,2 | 75            | 150          | 10                     | 12,1               | KE96002D04PK01BHL |
| 2,2       | 18  | 33   | 31   | 27,5 |      | 1,2 | 75            | 165          | 10                     | 12                 | KE96002D22PK00BHL |
| 2,2       | 18  | 33   | 31   | 27,5 | 10,2 | 1,2 | 75            | 165          | 11                     | 11,2               | KE96002D24PK01BHL |
| 4         | 22  | 30   | 42,5 | 37,5 |      | 1,2 | 55            | 220          | 11                     | 11,4               | KE96004D02PK00BHL |
| 4         | 22  | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 55            | 220          | 13                     | 10,6               | KE96004D04PK01BHL |
| 4,7       | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 55            | 259          | 11                     | 10                 | KE96004D72PK00BHL |
| 4,7       | 28  | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 55            | 259          | 15                     | 9,2                | KE96004D74PK01BHL |
| 5         | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 55            | 275          | 11                     | 9,6                | KE96005D02PK00BHL |
| 5         | 28  | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 55            | 275          | 16                     | 8,7                | KE96005D04PK01BHL |
| 6,8       | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 55            | 374          | 11                     | 7,5                | KE96006D82PK00BHL |
| 6,8       | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 55            | 374          | 19                     | 6,7                | KE96006D84PK01BHL |
| 9         | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 55            | 495          | 11                     | 6,1                | KE96009D02PK00BHL |
| 9         | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 55            | 495          | 21                     | 5,3                | KE96009D04PK01BHL |
| 9         | 30  | 45   | 42,5 | 37,5 | 10,2 | 1,2 | 55            | 495          | 22                     | 5                  | KE96009D06PK02BHL |
| 10        | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 30            | 300          | 11                     | 8,8                | KE96001002PK00BHL |
| 10        | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 30            | 300          | 20                     | 8                  | KE96001004PK01BHL |
| 15        | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 30            | 450          | 11                     | 6,5                | KE96001502PK00BHL |
| 15        | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 30            | 450          | 23                     | 5,6                | KE96001504PK01BHL |
| 15        | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 30            | 450          | 25                     | 5,4                | KE96001506PK02BHL |

Un 600VDC  
Urms 330VAC  
Us 900V

## KE9 TYPE STANDARD RATINGS

| Cap<br>µF | B   | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz(A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|-----|------|------|------|------|-----|---------------|--------------|------------------------|--------------------|-------------------|
| 0,15      | 8,5 | 17   | 26,5 | 22,5 |      | 0,8 | 135           | 20           | 3                      | 82                 | KE9700D152PK00BHL |
| 0,22      | 10  | 18,5 | 26,5 | 22,5 |      | 0,8 | 135           | 30           | 3                      | 61                 | KE9700D222PK00BHL |
| 0,33      | 11  | 20   | 26,5 | 22,5 |      | 0,8 | 135           | 45           | 4                      | 43,1               | KE9700D332PK00BHL |
| 0,33      | 11  | 20   | 31   | 27,5 |      | 0,8 | 105           | 35           | 4                      | 55,1               | KE9700D332PK01BHL |
| 0,47      | 13  | 22   | 31   | 27,5 |      | 1   | 105           | 49           | 5                      | 40                 | KE9700D472PK00BHL |
| 0,68      | 15  | 24,5 | 31   | 27,5 |      | 1   | 105           | 71           | 6                      | 28,7               | KE9700D682PK00BHL |
| 1         | 17  | 28   | 31   | 27,5 | 10,2 | 1,2 | 105           | 105          | 8                      | 19,9               | KE97001D02PK00BHL |
| 1         | 18  | 33   | 31   | 27,5 | 10,2 | 1,2 | 105           | 105          | 8                      | 19,1               | KE97001D04PK01BHL |
| 1,5       | 22  | 31   | 31   | 27,5 |      | 1,2 | 105           | 158          | 10                     | 14                 | KE97001D52PK00BHL |
| 1,5       | 22  | 31   | 31   | 27,5 | 10,2 | 1,2 | 105           | 158          | 10                     | 13,4               | KE97001D54PK01BHL |
| 1,5       | 17  | 28   | 42,5 | 37,5 |      | 1,2 | 70            | 105          | 8                      | 21,9               | KE97001D52PK02BHL |
| 2         | 22  | 30   | 42,5 | 37,5 |      | 1,2 | 70            | 140          | 10                     | 17                 | KE97002D02PK00BHL |
| 2,2       | 22  | 30   | 42,5 | 37,5 |      | 1,2 | 70            | 154          | 10                     | 15,9               | KE97002D22PK00BHL |
| 2,2       | 22  | 30   | 42,5 | 37,5 | 10,2 | 1,2 | 70            | 154          | 11                     | 15,1               | KE97002D24PK01BHL |
| 3         | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 70            | 210          | 11                     | 12,1               | KE97003D02PK00BHL |
| 3         | 28  | 37   | 42,5 | 37,5 | 20,3 | 1,2 | 70            | 210          | 14                     | 11,2               | KE97003D04PK01BHL |
| 3,3       | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 70            | 231          | 11                     | 11,3               | KE97003D32PK00BHL |
| 3,3       | 28  | 37   | 42,5 | 37,5 | 20,3 | 1,2 | 70            | 231          | 14                     | 10,5               | KE97003D34PK01BHL |
| 4         | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 70            | 280          | 11                     | 10,4               | KE97004D02PK00BHL |
| 4         | 28  | 37   | 42,5 | 37,5 | 20,3 | 1,2 | 70            | 280          | 15                     | 9,4                | KE97004D04PK01BHL |
| 4,7       | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 70            | 329          | 11                     | 8,5                | KE97004D72PK00BHL |
| 4,7       | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 70            | 329          | 18                     | 7,6                | KE97004D74PK01BHL |
| 5         | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 70            | 350          | 11                     | 8,1                | KE97005D02PK00BHL |
| 5         | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 70            | 350          | 18                     | 7,3                | KE97005D04PK01BHL |
| 6         | 33  | 45   | 42,5 | 37,5 |      | 1,2 | 70            | 420          | 11                     | 7,5                | KE97006D02PK00BHL |
| 6         | 33  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 70            | 420          | 20                     | 6,7                | KE97006D04PK01BHL |
| 6,8       | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 40            | 272          | 11                     | 10,3               | KE97006D82PK00BHL |
| 6,8       | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 40            | 272          | 18                     | 9,5                | KE97006D84PK01BHL |
| 8         | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 40            | 320          | 11                     | 9                  | KE97008D02PK00BHL |
| 8         | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 40            | 320          | 21                     | 8,2                | KE97008D04PK01BHL |
| 8         | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 40            | 320          | 21                     | 7,8                | KE97008D06PK02BHL |
| 9         | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 40            | 360          | 11                     | 8,2                | KE97009D02PK00BHL |
| 9         | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 40            | 360          | 22                     | 7,4                | KE97009D04PK01BHL |
| 9         | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 40            | 360          | 22                     | 7,1                | KE97009D06PK02BHL |

Un 700VDC  
Urms 400VAC  
Us 1050V

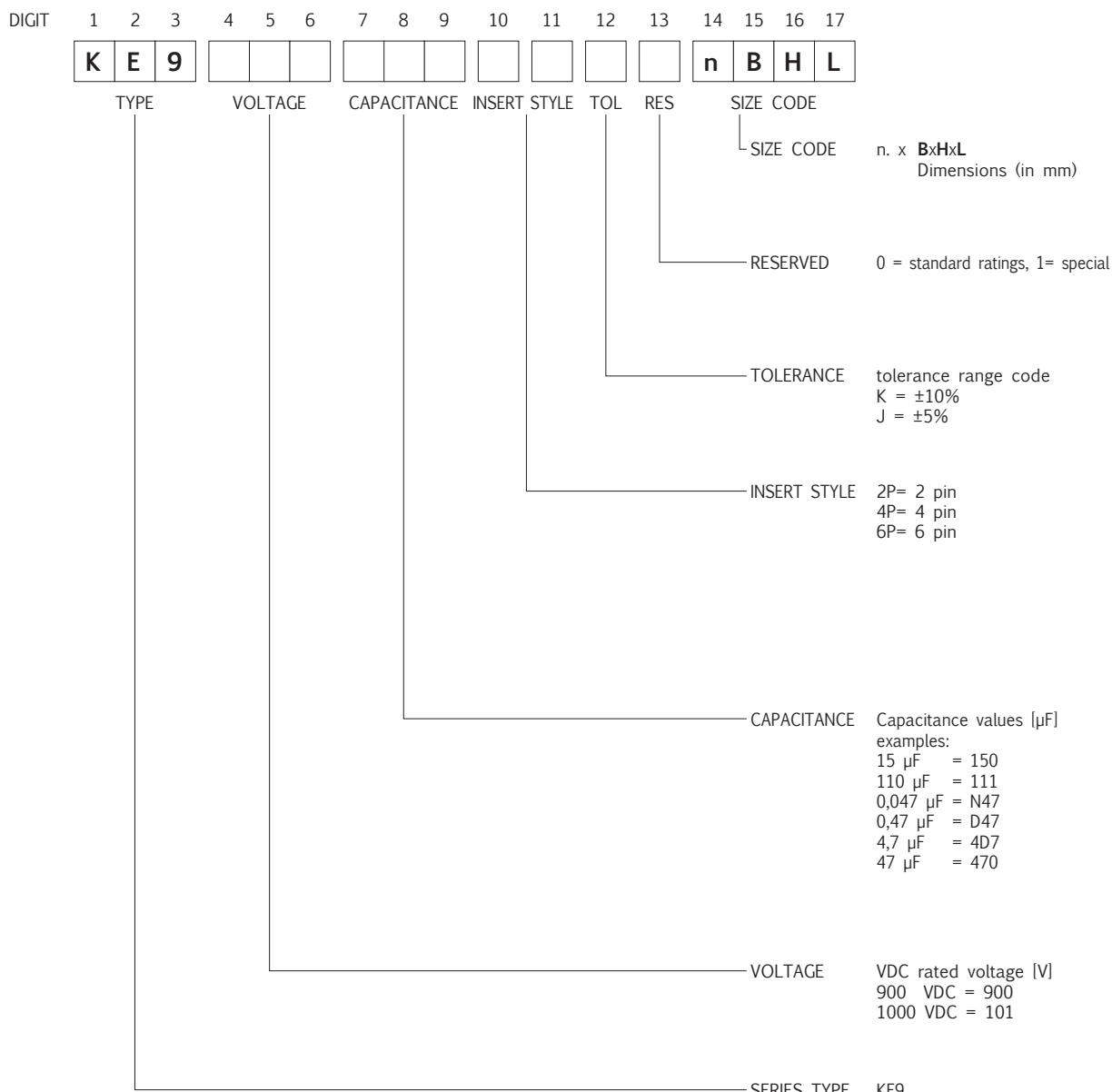
## KE9 TYPE STANDARD RATINGS

| Cap<br>µF | B   | H    | L    | P    | P1   | d   | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz(A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|-----|------|------|------|------|-----|---------------|--------------|------------------------|--------------------|-------------------|
| 0,1       | 8,5 | 17   | 26,5 | 22,5 |      | 0,8 | 300           | 30           | 2                      | 111,6              | KE9850D102PK00BHL |
| 0,1       | 9   | 18   | 31   | 27,5 |      | 0,8 | 200           | 20           | 2                      | 138,4              | KE9850D102PK01BHL |
| 0,15      | 10  | 18,5 | 26,5 | 22,5 |      | 0,8 | 300           | 45           | 3                      | 78,4               | KE9850D152PK00BHL |
| 0,15      | 9   | 18   | 31   | 27,5 |      | 0,8 | 200           | 30           | 3                      | 98,4               | KE9850D152PK01BHL |
| 0,22      | 11  | 20   | 26,5 | 22,5 |      | 0,8 | 300           | 66           | 3                      | 56,1               | KE9850D222PK00BHL |
| 0,22      | 11  | 20   | 31   | 27,5 |      | 0,8 | 200           | 44           | 3                      | 71,5               | KE9850D222PK01BHL |
| 0,33      | 13  | 22   | 31   | 27,5 |      | 1   | 200           | 66           | 4                      | 48,6               | KE9850D332PK00BHL |
| 0,47      | 15  | 24,5 | 31   | 27,5 |      | 1   | 200           | 94           | 5                      | 36                 | KE9850D472PK00BHL |
| 0,68      | 17  | 28   | 31   | 27,5 |      | 1,2 | 200           | 136          | 7                      | 25,1               | KE9850D682PK00BHL |
| 0,68      | 17  | 28   | 31   | 27,5 | 5,1  | 1,2 | 200           | 136          | 7                      | 24,5               | KE9850D684PK01BHL |
| 1         | 18  | 33   | 31   | 27,5 |      | 1,2 | 200           | 200          | 8                      | 18,3               | KE98501D02PK00BHL |
| 1         | 18  | 33   | 31   | 27,5 | 10,2 | 1,2 | 200           | 200          | 9                      | 17,5               | KE98501D04PK01BHL |
| 1         | 17  | 28   | 42,5 | 37,5 |      | 1,2 | 110           | 110          | 7                      | 27,5               | KE98501D02PK02BHL |
| 1,5       | 22  | 30   | 42,5 | 37,5 |      | 1,2 | 110           | 165          | 9                      | 19,5               | KE98501D52PK00BHL |
| 2         | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 110           | 220          | 11                     | 15,2               | KE98502D02PK00BHL |
| 2         | 28  | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 110           | 220          | 12                     | 14,2               | KE98502D04PK01BHL |
| 2,2       | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 110           | 242          | 11                     | 14                 | KE98502D22PK00BHL |
| 2,2       | 28  | 37   | 42,5 | 37,5 | 10,2 | 1,2 | 110           | 242          | 13                     | 13,2               | KE98502D24PK01BHL |
| 2,5       | 28  | 37   | 42,5 | 37,5 |      | 1,2 | 110           | 275          | 11                     | 12,6               | KE98502D52PK00BHL |
| 2,5       | 28  | 37   | 42,5 | 37,5 | 20,3 | 1,2 | 110           | 275          | 14                     | 11,7               | KE98502D54PK01BHL |
| 3         | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 110           | 330          | 11                     | 10,8               | KE98503D02PK00BHL |
| 3         | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 110           | 330          | 16                     | 9,8                | KE98503D04PK01BHL |
| 3         | 30  | 45   | 42,5 | 37,5 | 10,2 | 1,2 | 110           | 330          | 16                     | 9,6                | KE98503D06PK02BHL |
| 3,3       | 30  | 45   | 42,5 | 37,5 |      | 1,2 | 110           | 363          | 11                     | 10                 | KE98503D32PK00BHL |
| 3,3       | 30  | 45   | 42,5 | 37,5 | 20,3 | 1,2 | 110           | 363          | 16                     | 9,2                | KE98503D34PK01BHL |
| 3,3       | 30  | 45   | 42,5 | 37,5 | 10,2 | 1,2 | 110           | 363          | 17                     | 8,9                | KE98503D36PK02BHL |
| 4         | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 55            | 220          | 11                     | 13,9               | KE98504D02PK00BHL |
| 4         | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 55            | 220          | 15                     | 12,9               | KE98504D04PK01BHL |
| 4         | 30  | 45   | 57,5 | 52,5 | 10,2 | 1,2 | 55            | 220          | 16                     | 12,6               | KE98504D06PK02BHL |
| 4,7       | 30  | 45   | 57,5 | 52,5 |      | 1,2 | 55            | 259          | 11                     | 12,2               | KE98504D72PK00BHL |
| 4,7       | 30  | 45   | 57,5 | 52,5 | 20,3 | 1,2 | 55            | 259          | 16                     | 11,2               | KE98504D74PK01BHL |
| 4,7       | 30  | 45   | 57,5 | 52,5 | 10,2 | 1,2 | 55            | 259          | 17                     | 10,9               | KE98504D76PK02BHL |
| 5,6       | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 55            | 308          | 11                     | 10,5               | KE98505D62PK00BHL |
| 5,6       | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 55            | 308          | 19                     | 9,7                | KE98505D64PK01BHL |
| 5,6       | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 55            | 308          | 19                     | 9,3                | KE98505D66PK02BHL |
| 6         | 35  | 50   | 57,5 | 52,5 |      | 1,2 | 55            | 330          | 11                     | 9,9                | KE98506D02PK00BHL |
| 6         | 35  | 50   | 57,5 | 52,5 | 20,3 | 1,2 | 55            | 330          | 20                     | 9,1                | KE98506D04PK01BHL |
| 6         | 35  | 50   | 57,5 | 52,5 | 10,2 | 1,2 | 55            | 330          | 20                     | 8,8                | KE98506D06PK02BHL |

Un 850VDC  
Urms 450VAC  
Us 1275V

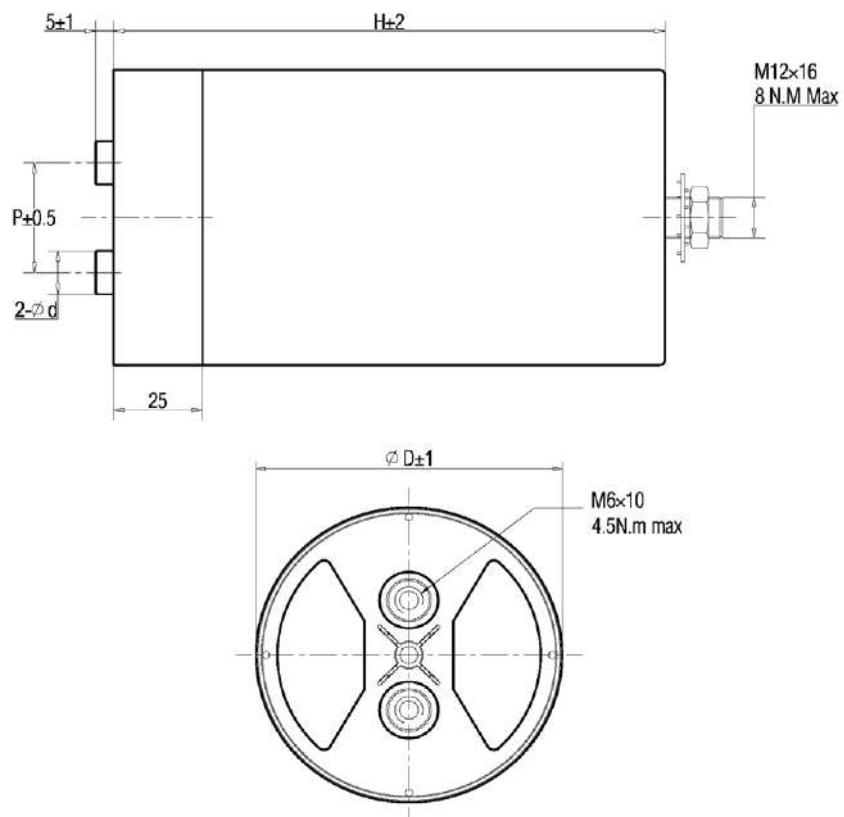
## PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS

Total length is 17 digits.



# KE8 TYPE -40°C +85°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | Inverter, AC Filter, UPS   |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Metallized Polypropylene film  |
| <b>Construction</b>                  | Aluminum package, plastic bracket  |
| <b>Potting</b>                       | Resin filled (UL94 V-0)  |
| <br>                                 |  |
| <b>Operating temperature range</b>   | -40 to +85°C   |
| <b>Capacitance</b>                   | 10 to 300μF  |
| <b>Rated Voltage</b>                 | 300 to 1400 VAC  |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤2x10 <sup>-3</sup> Measured at 100 Hz and 20±5°C                                |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <br>                                 |  |
| <b>Dielectric strength</b>           | 2.15Un (AC @50Hz) applied to 10s at 20±5°C                                       |
| <b>Test voltage terminal to case</b> | 2.15Un+2000VAC (10s,50Hz) MIN 3KVAC  |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## DISK DIMENSIONS

|             |            |           |           |
|-------------|------------|-----------|-----------|
| D= 76,86 mm | D= 96 mm   | D= 116 mm | D= 136 mm |
| d= 12,5 mm  | d= 12,5 mm | d= 14 mm  | d= 14 mm  |
| P= 32 mm    | P= 45 mm   | P= 50 mm  | P= 50 mm  |

## KE8 TYPE STANDARD RATINGS

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER       |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|-------------------|
| 115       | 76        | 70        | 1,3           | 39                     | 2,1                 | 5,4          | KE8300121_6K0K070 |
| 150       | 86        | 70        | 1,7           | 45                     | 1,8                 | 4,5          | KE8300151_6K0Q070 |
| 200       | 86        | 95        | 3,3           | 61                     | 1,1                 | 4,0          | KE8300201_6K0Q095 |
| 230       | 76        | 125       | 2,5           | 55                     | 1,3                 | 4,1          | KE8300231_6K0K125 |
| 300       | 86        | 125       | 3,3           | 62                     | 1,2                 | 3,5          | KE8300301_6K0Q125 |

Urms 300VAC  
Un 420VAC

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER       |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|-------------------|
| 50        | 76        | 70        | 0,9           | 35                     | 2,8                 | 5,4          | KE8450500_6K0K070 |
| 60        | 76        | 80        | 0,8           | 34                     | 3,0                 | 5,1          | KE8450600_6K0K080 |
| 70        | 86        | 70        | 1,2           | 42                     | 2,3                 | 4,5          | KE8450700_6K0Q070 |
| 80        | 86        | 80        | 1,1           | 40                     | 2,5                 | 4,3          | KE8450800_6K0Q080 |
| 100       | 76        | 125       | 1,7           | 51                     | 1,7                 | 4,1          | KE8450101_6K0K125 |
| 120       | 76        | 145       | 1,7           | 50                     | 1,8                 | 3,8          | KE8450121_6K0K145 |
| 130       | 86        | 125       | 2,2           | 58                     | 1,5                 | 3,5          | KE8450131_6K0Q125 |
| 200       | 96        | 150       | 2,8           | 65                     | 1,4                 | 2,8          | KE8450201_6K0R150 |

Urms 450VAC  
Un 640VAC

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER       |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|-------------------|
| 45        | 76        | 70        | 0,8           | 35                     | 3,0                 | 5,4          | KE8500450_6K0K070 |
| 55        | 76        | 80        | 0,8           | 33                     | 3,1                 | 5,1          | KE8500550_6K0K080 |
| 60        | 86        | 70        | 1,1           | 41                     | 2,5                 | 4,5          | KE8500600_6K0Q070 |
| 72        | 86        | 80        | 1,1           | 39                     | 2,6                 | 4,3          | KE8500720_6K0Q080 |
| 90        | 76        | 125       | 1,6           | 50                     | 1,8                 | 4,1          | KE8500900_6K0K125 |
| 110       | 76        | 145       | 1,6           | 49                     | 1,9                 | 3,8          | KE8500111_6K0K145 |
| 120       | 86        | 125       | 2,2           | 57                     | 1,5                 | 3,5          | KE8500121_6K0Q125 |
| 150       | 86        | 145       | 2,2           | 57                     | 1,6                 | 3,3          | KE8500151_6K0Q145 |
| 180       | 96        | 150       | 2,6           | 64                     | 1,5                 | 2,8          | KE8500181_6K0R150 |

Urms 500VAC  
Un 710VAC

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER       |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|-------------------|
| 25        | 76        | 70        | 1,2           | 38                     | 3,1                 | 5,4          | KE8550250_6K0K070 |
| 30        | 76        | 80        | 1,2           | 37                     | 3,1                 | 5,1          | KE8550300_6K0K080 |
| 40        | 76        | 95        | 1,2           | 36                     | 3,1                 | 4,7          | KE8550400_6K0K095 |
| 50        | 76        | 125       | 2,5           | 54                     | 1,8                 | 4,1          | KE8550500_6K0K125 |
| 60        | 76        | 145       | 2,4           | 53                     | 1,9                 | 3,8          | KE8550600_6K0K145 |
| 68        | 86        | 125       | 3,4           | 61                     | 1,6                 | 3,5          | KE8550680_6K0Q125 |
| 82        | 86        | 145       | 3,3           | 61                     | 1,6                 | 3,3          | KE8550820_6K0Q145 |
| 110       | 86        | 175       | 3,4           | 62                     | 1,6                 | 3,0          | KE8550111_6K0Q175 |
| 140       | 96        | 180       | 4,3           | 69                     | 1,4                 | 2,6          | KE8550141_6K0R180 |
| 160       | 116       | 150       | 6,3           | 81                     | 1,2                 | 2,2          | KE8550161_6K0T150 |
| 200       | 116       | 180       | 6,1           | 82                     | 1,3                 | 2,0          | KE8550201_6K0T180 |

Urms 550VAC  
Un 780VAC

## KE8 TYPE STANDARD RATINGS

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER       |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|-------------------|
| 18        | 76        | 70        | 1,1           | 36                     | 3,7                 | 5,4          | KE8690180_6K0K070 |
| 22        | 76        | 80        | 1,1           | 36                     | 3,6                 | 5,1          | KE8690220_6K0K080 |
| 28        | 76        | 95        | 1,0           | 34                     | 3,7                 | 4,7          | KE8690280_6K0K095 |
| 35        | 76        | 125       | 2,1           | 52                     | 2,2                 | 4,1          | KE8690350_6K0K125 |
| 44        | 76        | 145       | 2,1           | 52                     | 2,1                 | 3,8          | KE8690440_6K0K145 |
| 58        | 86        | 145       | 2,8           | 59                     | 1,8                 | 3,3          | KE8690580_6K0Q145 |
| 75        | 86        | 175       | 2,8           | 59                     | 1,6                 | 3,0          | KE8690750_6K0Q175 |
| 95        | 96        | 180       | 3,5           | 67                     | 1,6                 | 2,6          | KE8690950_6K0R180 |
| 110       | 116       | 150       | 5,3           | 79                     | 1,3                 | 2,2          | KE8690111_6K0T150 |
| 145       | 116       | 180       | 5,3           | 80                     | 1,3                 | 2,0          | KE8690151_6K0T180 |

Urms 690VAC  
Un 980VAC

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER       |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|-------------------|
| 10        | 76        | 70        | 0,7           | 32                     | 5,6                 | 5,4          | KE8850100_6K0K070 |
| 15        | 76        | 80        | 0,8           | 33                     | 4,6                 | 5,1          | KE8850150_6K0K080 |
| 20        | 76        | 95        | 0,9           | 32                     | 4,4                 | 4,7          | KE8850200_6K0K095 |
| 27        | 76        | 125       | 1,9           | 50                     | 2,5                 | 4,1          | KE8850270_6K0K125 |
| 34        | 86        | 125       | 2,4           | 57                     | 2,2                 | 3,5          | KE8850340_6K0Q125 |
| 42        | 86        | 145       | 2,4           | 57                     | 2,1                 | 3,3          | KE8850420_6K0Q145 |
| 56        | 86        | 175       | 2,4           | 57                     | 2,0                 | 3,0          | KE8850560_6K0Q175 |
| 70        | 96        | 180       | 3,0           | 65                     | 1,8                 | 2,6          | KE8850700_6K0R180 |
| 80        | 116       | 150       | 4,5           | 78                     | 1,5                 | 2,2          | KE8850800_6K0T150 |
| 105       | 116       | 180       | 4,5           | 78                     | 1,5                 | 2,0          | KE8850111_6K0T180 |

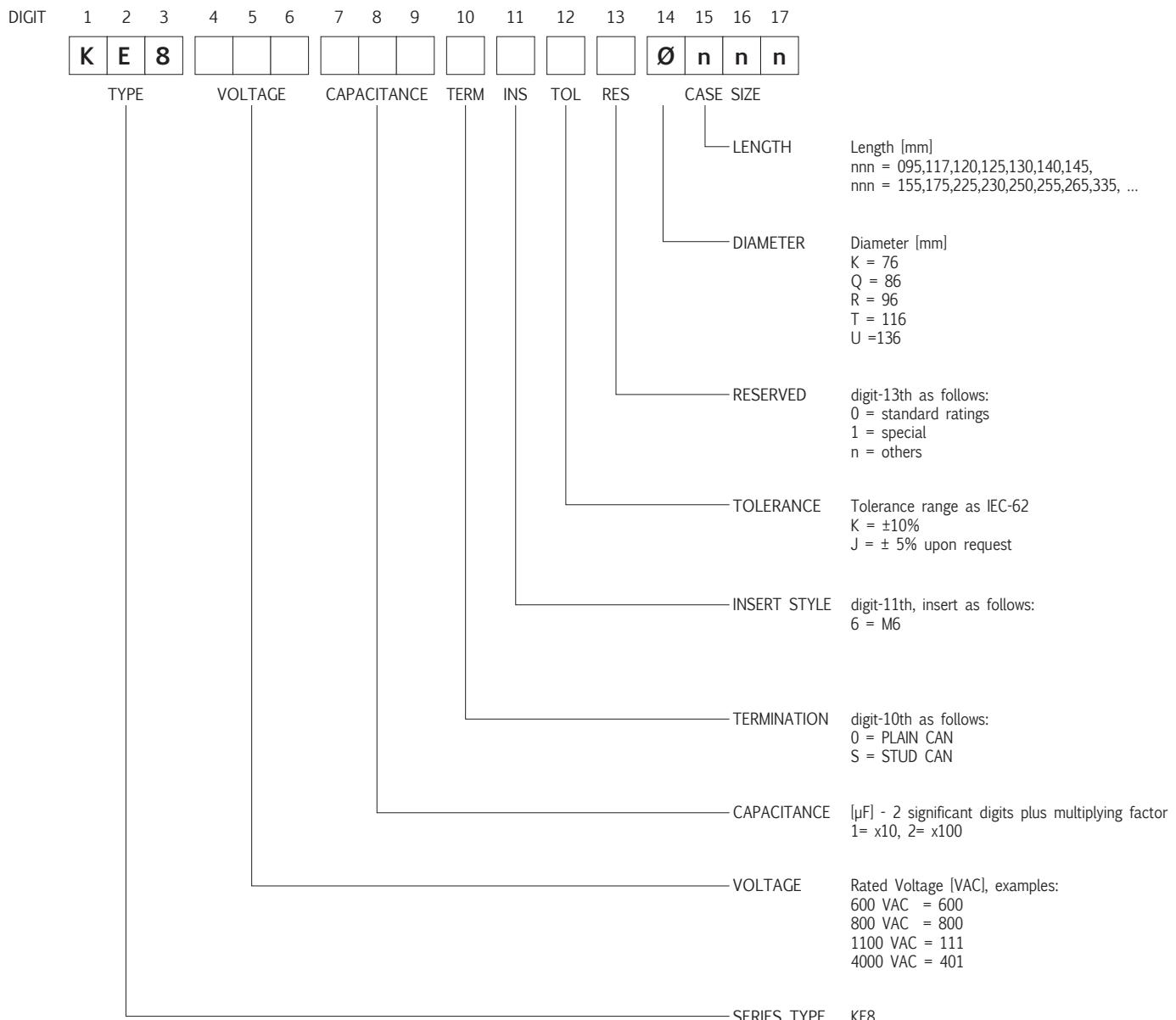
Urms 850VAC  
Un 1200VAC

| Cap<br>µF | D<br>(mm) | H<br>(mm) | Ipeak<br>(KA) | IMax@45°C<br>@10KHz(A) | ESR<br>@1.0KHz (mΩ) | Rth<br>(k/w) | PART NUMBER        |
|-----------|-----------|-----------|---------------|------------------------|---------------------|--------------|--------------------|
| 13        | 76        | 175       | 2,2           | 50                     | 4,0                 | 3,4          | KE81400130_6K0K175 |
| 16        | 86        | 175       | 2,7           | 56                     | 3,4                 | 3,0          | KE81400160_6K0Q175 |
| 33        | 116       | 180       | 5,6           | 78                     | 2,1                 | 2,0          | KE81400330_6K0T180 |
| 46        | 136       | 180       | 7,7           | 90                     | 1,7                 | 1,7          | KE81400460_6K0U180 |

Urms 1400VAC  
Un 1980VAC

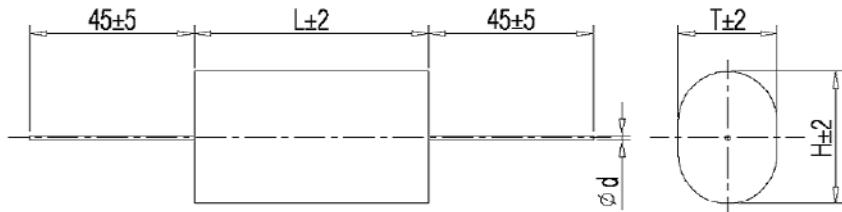
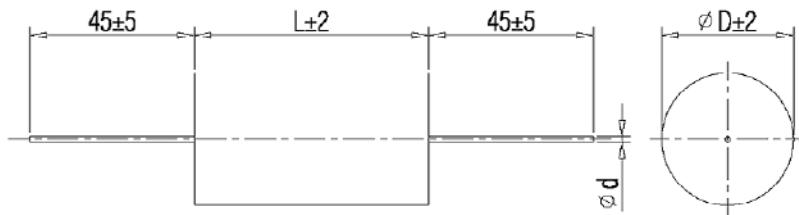
## PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS

Total length is 17 digits



## K9E TYPE -40°C +85°C 100000H

|                                      |  |
|--------------------------------------|--|
| <b>Applications</b>                  | High Frequency IGBT, Surge absorption  |
| <b>Reference Standard</b>            | IEC 61071  |
| <b>Dielectric</b>                    | Metallized Polypropylene film  |
| <b>Construction</b>                  | Polyester Film plastic case package, resin filled (UL94 V-0)                     |
| <b>Operating temperature range</b>   | -40 to +85°C   |
| <b>Capacitance</b>                   | 0.0068 to 8.5μF  |
| <b>Rated Voltage</b>                 | 700 to 3000 VDC (380 to 750 VAC)   |
| <b>Tolerance</b>                     | ±5%, ±10%  |
| <b>Dissipation factor</b>            | ≤6x10 <sup>-4</sup> Measured at 100 Hz and 20±5°C                                |
| <b>Life expectancy</b>               | 100,000 hours at Un and 70°C (Hotspot temperature)                               |
| <b>Dielectric strength</b>           | 1.5Un (DC) applied to 10s at 20±5°C  |
| <b>Test voltage terminal to case</b> | 1.5Un+1000VAC (10s,50Hz) MIN 3KVAC(10s,50Hz)                                     |
| <b>Insulation resistance</b>         | 30000s but not exceed 30GΩ, after 1 minute of electrification at 100VDC (20±5°C) |



## K9E TYPE STANDARD RATINGS

| Cap<br>µF | L  | Length (mm) |                 |      | du/dt     | Ipeak | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|-------------|-----------------|------|-----------|-------|-------------------------|--------------------|-------------------|
|           |    | D<br>round  | T<br>elliptical | H    | d<br>V/µs | (A)   |                         |                    |                   |
| 0,22      | 32 | 7,9         | 14,3            | 0,8  | 480       | 106   | 5,0                     | 13,7               | K9E700D22E8K03CJ3 |
| 0,33      | 32 | 14,2        | 9,5             | 17,5 | 0,8       | 480   | 158                     | 5,0                | K9E700D33_8K03DTH |
| 0,47      | 32 | 16,6        | 11,9            | 19,9 | 0,8       | 480   | 226                     | 5,0                | K9E700D47_8K03DTH |
| 0,68      | 32 | 19,7        | 14,9            | 22,9 | 1,0       | 480   | 326                     | 8,0                | K9E700D68_0K03DTH |
| 0,68      | 44 | 15,6        | 10,9            | 18,9 | 1,0       | 325   | 221                     | 8,0                | K9E700D68_0K04DTH |
| 1,0       | 44 | 18,7        | 13,9            | 21,9 | 1,2       | 325   | 325                     | 11,5               | K9E7001D0_2K04DTH |
| 1,5       | 44 | 22,6        | 16,3            | 27,5 | 1,2       | 325   | 488                     | 12                 | K9E7001D5_2K04DTH |
| 2,0       | 44 | 25,9        | 19,5            | 30,7 | 1,2       | 325   | 650                     | 12                 | K9E7002D0_2K04DTH |
| 2,2       | 44 | 27,1        | 20,7            | 31,9 | 1,2       | 325   | 715                     | 12                 | K9E7002D2_2K04DTH |
| 2,2       | 57 | 22,6        | 16,3            | 27,5 | 1,2       | 240   | 528                     | 12                 | K9E7002D2_2K05DTH |
| 2,5       | 44 | 28,8        | 22,4            | 33,6 | 1,2       | 325   | 813                     | 12                 | K9E7002D5_2K04DTH |
| 2,5       | 57 | 24,0        | 17,7            | 28,9 | 1,2       | 240   | 600                     | 12                 | K9E7002D5_2K05DTH |
| 3,0       | 44 | 31,4        | 25,0            | 36,2 | 1,2       | 325   | 975                     | 12                 | K9E7003D0_2K04DTH |
| 3,0       | 57 | 26,2        | 19,8            | 31,0 | 1,2       | 240   | 720                     | 12                 | K9E7003D0_2K05DTH |
| 3,3       | 44 | 32,9        | 26,4            | 37,6 | 1,2       | 325   | 1073                    | 12                 | K9E7003D3_2K04DTH |
| 3,5       | 57 | 28,2        | 21,8            | 33,0 | 1,2       | 240   | 840                     | 12                 | K9E7003D5_2K05DTH |
| 4,0       | 57 | 30,0        | 23,6            | 34,8 | 1,2       | 240   | 960                     | 12                 | K9E7004D0_2K05DTH |
| 4,7       | 57 | 32,5        | 26,0            | 37,2 | 1,2       | 240   | 1128                    | 12                 | K9E7004D7_2K05DTH |
| 5,6       | 57 | 35,4        | 28,8            | 40,0 | 1,2       | 240   | 1344                    | 12                 | K9E7005D6_2K05DTH |
| 6,8       | 57 | 38,9        |                 |      | 1,2       | 240   | 1632                    | 12                 | K9E7006D8R2K05389 |
| 8,5       | 57 | 43,3        |                 |      | 1,2       | 240   | 2040                    | 12                 | K9E7008D5R2K05433 |

Un 700VDC  
Urms 380VAC  
Us 1050V

| Cap<br>µF | L  | Length (mm) |                 |      | du/dt     | Ipeak | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|-------------|-----------------|------|-----------|-------|-------------------------|--------------------|-------------------|
|           |    | D<br>round  | T<br>elliptical | H    | d<br>V/µs | (A)   |                         |                    |                   |
| 0,10      | 32 | 5,9         | 12,3            | 0,8  | 700       | 70    | 3,7                     | 22,6               | K9E850D10E8K03AH3 |
| 0,15      | 32 | 7,6         | 14,0            | 0,8  | 700       | 105   | 4,9                     | 20,3               | K9E850D15_8K03DTH |
| 0,22      | 32 | 13,7        | 9,1             | 17,1 | 0,8       | 700   | 154                     | 5,0                | K9E850D22_8K03DTH |
| 0,22      | 44 | 11,1        | 7,1             | 13,5 | 0,8       | 400   | 88                      | 4,9                | K9E850D22_8K04DTH |
| 0,33      | 32 | 16,4        | 11,7            | 19,7 | 1,0       | 700   | 231                     | 8,0                | K9E850D33_0K03DTH |
| 0,33      | 44 | 13,2        | 8,5             | 16,5 | 1,0       | 400   | 132                     | 6,4                | K9E850D33_0K04DTH |
| 0,47      | 32 | 19,3        | 14,6            | 22,6 | 1,0       | 700   | 329                     | 8,0                | K9E850D47_0K03DTH |
| 0,47      | 44 | 15,4        | 10,7            | 18,7 | 1,0       | 400   | 188                     | 8,0                | K9E850D47_0K04DTH |
| 0,68      | 44 | 18,2        | 13,5            | 21,5 | 1,0       | 400   | 272                     | 8,0                | K9E850D68_0K04DTH |
| 1,0       | 44 | 21,8        | 15,6            | 26,8 | 1,2       | 400   | 400                     | 12                 | K9E8501D0_2K04DTH |
| 1,5       | 44 | 26,4        | 20,1            | 31,3 | 1,2       | 400   | 600                     | 12                 | K9E8501D5_2K04DTH |
| 2,0       | 44 | 30,4        | 23,9            | 35,1 | 1,2       | 400   | 800                     | 12                 | K9E8502D0_2K04DTH |
| 2,2       | 44 | 31,8        | 25,3            | 36,5 | 1,2       | 400   | 880                     | 12                 | K9E8502D2_2K04DTH |
| 2,2       | 57 | 26,5        | 20,1            | 31,3 | 1,2       | 290   | 638                     | 12                 | K9E8502D2_2K05DTH |
| 2,5       | 44 | 33,8        | 27,3            | 38,5 | 1,2       | 400   | 1000                    | 12                 | K9E8502D5_2K04DTH |
| 2,5       | 57 | 28,1        | 21,7            | 32,9 | 1,2       | 290   | 725                     | 12                 | K9E8502D5_2K05DTH |
| 3,0       | 57 | 30,7        | 24,3            | 35,5 | 1,2       | 290   | 870                     | 12                 | K9E8503D0_2K05DTH |
| 3,3       | 57 | 32,2        | 25,7            | 36,9 | 1,2       | 290   | 957                     | 12                 | K9E8503D3_2K05DTH |
| 4,0       | 57 | 35,3        | 28,8            | 40,0 | 1,2       | 290   | 1160                    | 12                 | K9E8504D0_2K05DTH |
| 4,7       | 57 | 38,2        |                 |      | 1,2       | 290   | 1363                    | 12                 | K9E8504D7R2K05382 |
| 5,6       | 57 | 41,6        |                 |      | 1,2       | 290   | 1624                    | 12                 | K9E8505D6R2K05416 |

Un 850VDC  
Urms 450VAC  
Us 1275V

## K9E TYPE STANDARD RATINGS

| Cap<br>µF | L  | Length (mm) |                 |      | du/dt | Ipeak | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|-------------|-----------------|------|-------|-------|-------------------------|--------------------|-------------------|
|           |    | D<br>round  | T<br>elliptical | H    | d     | V/µs  | (A)                     |                    |                   |
| 0,05      | 32 | 5,5         | 10,3            | 0,8  | 1100  | 52    | 2,7                     | 36,7               | K9E121D05E8K03AF3 |
| 0,07      | 32 | 6,9         | 11,7            | 0,8  | 1100  | 75    | 3,4                     | 27,5               | K9E121D07E8K03BG6 |
| 0,10      | 32 | 8,7         | 13,5            | 0,8  | 1100  | 110   | 4,5                     | 17,9               | K9E121D10E8K03DI5 |
| 0,10      | 44 | 9,8         | 5,8             | 12,2 | 0,8   | 650   | 65                      | 3,5                | K9E121D10_8K04DTH |
| 0,15      | 32 | 14,3        | 9,6             | 17,6 | 1,0   | 1100  | 165                     | 5,9                | K9E121D15_0K03DTH |
| 0,15      | 44 | 11,5        | 7,5             | 13,9 | 1,0   | 650   | 98                      | 4,5                | K9E121D15_0K04DTH |
| 0,22      | 32 | 17,0        | 12,3            | 20,3 | 1,0   | 1100  | 242                     | 7,7                | K9E121D22_0K03DTH |
| 0,22      | 44 | 13,6        | 8,9             | 16,9 | 1,0   | 650   | 143                     | 5,9                | K9E121D22_0K04DTH |
| 0,33      | 32 | 20,5        | 15,7            | 23,7 | 1,0   | 1100  | 363                     | 8,0                | K9E121D33_0K03DTH |
| 0,33      | 44 | 16,3        | 11,6            | 19,6 | 1,0   | 650   | 215                     | 7,7                | K9E121D33_0K04DTH |
| 0,47      | 44 | 19,7        | 14,4            | 22,4 | 1,0   | 650   | 306                     | 8,0                | K9E121D47_0K04DTH |
| 0,68      | 44 | 22,8        | 16,5            | 27,7 | 1,2   | 650   | 442                     | 12,0               | K9E121D68_2K04DTH |
| 1,00      | 44 | 27,4        | 21,0            | 32,2 | 1,2   | 650   | 650                     | 12,0               | K9E1211D0_2K04DTH |
| 1,00      | 57 | 22,8        | 16,5            | 27,7 | 1,2   | 385   | 385                     | 12,0               | K9E1211D0_2K05DTH |
| 1,20      | 44 | 29,9        | 23,4            | 34,6 | 1,2   | 650   | 780                     | 12,0               | K9E1211D2_2K04DTH |
| 1,20      | 57 | 24,9        | 18,5            | 29,7 | 1,2   | 385   | 462                     | 12,0               | K9E1211D2_2K05DTH |
| 1,5       | 44 | 33,3        | 26,8            | 38,0 | 1,2   | 650   | 975                     | 12                 | K9E1211D5_2K04DTH |
| 1,5       | 57 | 27,7        | 21,3            | 32,5 | 1,2   | 385   | 578                     | 12                 | K9E1211D5_2K05DTH |
| 2,0       | 57 | 31,8        | 25,3            | 36,5 | 1,2   | 385   | 770                     | 12                 | K9E1212D0_2K05DTH |
| 2,2       | 57 | 33,3        | 26,8            | 38,0 | 1,2   | 385   | 847                     | 12                 | K9E1212D2_2K05DTH |
| 2,5       | 57 | 35,4        | 28,9            | 40,1 | 1,2   | 385   | 963                     | 12                 | K9E1212D5_2K05DTH |
| 3,0       | 57 | 38,7        |                 |      | 1,2   | 385   | 1155                    | 12                 | K9E1213D0R2K05387 |
| 3,3       | 57 | 40,6        |                 |      | 1,2   | 385   | 1270                    | 12                 | K9E1213D3R2K05406 |
| 4,0       | 57 | 44,6        |                 |      | 1,2   | 385   | 1540                    | 12                 | K9E1214D0R2K05446 |

Un 1200VDC  
Urms 500VAC  
Us 1800V

| Cap<br>µF | L  | Length (mm) |                 |      | du/dt | Ipeak | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|-------------|-----------------|------|-------|-------|-------------------------|--------------------|-------------------|
|           |    | D<br>round  | T<br>elliptical | H    | d     | V/µs  | (A)                     |                    |                   |
| 0,068     | 32 | 8,5         | 14,9            | 0,8  | 1225  | 83    | 4,3                     | 24,3               | K9E15168ME8K03DJ9 |
| 0,10      | 32 | 14,7        | 10,0            | 18,0 | 0,8   | 1225  | 123                     | 5,0                | K9E151D10_8K03DTH |
| 0,15      | 32 | 17,7        | 13,0            | 21,0 | 1,0   | 1225  | 184                     | 7,5                | K9E151D15_0K03DTH |
| 0,22      | 32 | 21,1        | 14,9            | 26,1 | 1,0   | 1225  | 270                     | 8,0                | K9E151D22_0K03DTH |
| 0,22      | 44 | 16,8        | 12,1            | 20,1 | 1,0   | 800   | 176                     | 7,2                | K9E151D22_0K04DTH |
| 0,33      | 44 | 20,2        | 15,5            | 23,5 | 1,0   | 800   | 264                     | 8,0                | K9E151D33_0K04DTH |
| 0,47      | 44 | 23,9        | 17,6            | 28,8 | 1,2   | 800   | 376                     | 12,0               | K9E151D47_2K04DTH |
| 0,68      | 44 | 28,5        | 22,1            | 33,3 | 1,2   | 800   | 544                     | 12                 | K9E151D68_2K04DTH |
| 1,0       | 44 | 34,4        | 27,9            | 39,1 | 1,2   | 800   | 800                     | 12                 | K9E1511D0_2K04DTH |
| 1,0       | 57 | 28,6        | 22,2            | 33,4 | 1,2   | 570   | 570                     | 12                 | K9E1511D0_2K05DTH |
| 1,2       | 57 | 31,2        | 24,8            | 36,0 | 1,2   | 570   | 684                     | 12                 | K9E1511D2_2K05DTH |
| 1,5       | 57 | 34,8        | 28,3            | 39,5 | 1,2   | 570   | 855                     | 12                 | K9E1511D5_2K05DTH |
| 2,0       | 57 | 40,0        |                 |      | 1,2   | 570   | 1140                    | 12                 | K9E1512D0R2K05400 |
| 2,2       | 57 | 41,9        |                 |      | 1,2   | 570   | 1254                    | 12                 | K9E1512D2R2K05419 |
| 2,5       | 57 | 44,6        |                 |      | 1,2   | 570   | 1425                    | 12                 | K9E1512D5R2K05446 |
| 2,5       | 57 | 28,1        | 21,7            | 32,9 | 1,2   | 290   | 725                     | 12                 | K9E8502D5_2K05DTH |

Un 1500VDC  
Urms 570VAC  
Us 2250V

## K9E TYPE STANDARD RATINGS

| Cap<br>µF | L  | Length (mm) |                 |      |      | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|-------------|-----------------|------|------|---------------|--------------|-------------------------|--------------------|-------------------|
|           |    | D<br>round  | T<br>elliptical | H    | d    |               |              |                         |                    |                   |
| 0,033     | 32 | 5,9         | 12,3            | 0,8  | 1350 | 45            | 2,7          | 47,5                    | K9E17133ME8K03AH3  |                   |
| 0,047     | 32 | 7,4         | 13,8            | 0,8  | 1350 | 63            | 3,4          | 30,4                    | K9E17147ME8K03CI8  |                   |
| 0,068     | 32 | 13,3        | 8,7             | 16,7 | 0,8  | 1350          | 92           | 4,4                     | 23,9               | K9E17168M_8K03DTH |
| 0,10      | 32 | 15,8        | 11,1            | 19,1 | 0,8  | 1350          | 135          | 5,0                     | 17,3               | K9E171D10_8K03DTH |
| 0,15      | 32 | 19,1        | 14,3            | 22,3 | 1,0  | 1350          | 203          | 7,9                     | 11,8               | K9E171D15_0K03DTH |
| 0,22      | 32 | 22,8        | 16,5            | 27,7 | 1,0  | 1350          | 297          | 8,0                     | 6,6                | K9E171D22_0K03DTH |
| 0,22      | 44 | 18,1        | 13,3            | 21,3 | 1,0  | 880           | 194          | 7,9                     | 10,4               | K9E171D22_0K04DTH |
| 0,33      | 44 | 21,8        | 15,6            | 26,8 | 1,0  | 880           | 290          | 8,0                     | 6,9                | K9E171D33_0K04DTH |
| 0,47      | 44 | 25,8        | 19,5            | 30,7 | 1,2  | 880           | 414          | 12                      | 4,7                | K9E171D68_2K04DTH |
| 0,68      | 44 | 30,8        | 24,4            | 35,6 | 1,2  | 880           | 598          | 12                      | 4,5                | K9E1711D0_2K04DTH |
| 1,0       | 44 | 37,2        | 30,6            | 41,8 | 1,2  | 880           | 880          | 12                      | 3,8                | K9E1711D0_2K05DTH |
| 1,0       | 57 | 30,9        | 24,4            | 35,6 | 1,2  | 610           | 610          | 12                      | 3,6                | K9E1711D0_2K05DTH |
| 1,2       | 57 | 33,8        | 27,2            | 38,4 | 1,2  | 610           | 732          | 12                      | 3,5                | K9E1711D2_2K05DTH |
| 1,5       | 57 | 37,6        |                 |      | 1,2  | 610           | 915          | 12                      | 3,5                | K9E1711D5R2K05419 |
| 2,0       | 57 | 43,3        |                 |      | 1,2  | 610           | 1220         | 12                      | 3,4                | K9E1712D0R2K05446 |

Un 1700VDC  
Urms 575VAC  
Us 2550V

| Cap<br>µF | L  | Length (mm) |                 |      |      | du/dt<br>V/µs | Ipeak<br>(A) | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|-------------|-----------------|------|------|---------------|--------------|-------------------------|--------------------|-------------------|
|           |    | D<br>round  | T<br>elliptical | H    | d    |               |              |                         |                    |                   |
| 0,022     | 32 | 5,4         | 11,8            | 0,8  | 1750 | 39            | 2,3          | 68,7                    | K9E20133ME8K03AG8  |                   |
| 0,033     | 32 | 7,0         | 13,4            | 0,8  | 1750 | 58            | 3,0          | 52,7                    | K9E20133ME8K03CI4  |                   |
| 0,047     | 32 | 8,1         | 16,1            | 0,8  | 1750 | 82            | 3,9          | 34,8                    | K9E20147ME8K03DL1  |                   |
| 0,047     | 44 | 10,4        | 6,4             | 12,8 | 0,8  | 1000          | 47           | 3,1                     | 45,8               | K9E20147M_8K04DTH |
| 0,068     | 32 | 15,0        | 10,3            | 18,3 | 1,0  | 1750          | 119          | 5,1                     | 23,5               | K9E20168M_0K03DTH |
| 0,068     | 44 | 12,1        | 8,1             | 14,5 | 0,8  | 1000          | 68           | 4,0                     | 16,3               | K9E20168M_8K04DTH |
| 0,10      | 32 | 17,8        | 13,1            | 21,1 | 1,0  | 1750          | 175          | 6,7                     | 13,8               | K9E201D10_0K03DTH |
| 0,10      | 44 | 14,2        | 9,6             | 17,6 | 1,0  | 1000          | 100          | 5,3                     | 12,4               | K9E201D10_0K04DTH |
| 0,15      | 44 | 17,1        | 12,4            | 20,4 | 1,0  | 1000          | 150          | 7,0                     | 8,6                | K9E201D15_0K04DTH |
| 0,22      | 44 | 20,4        | 15,6            | 23,6 | 1,0  | 1000          | 220          | 8,0                     | 8,5                | K9E201D22_0K04DTH |
| 0,33      | 44 | 24,7        | 18,4            | 29,6 | 1,2  | 1000          | 330          | 12                      | 5,2                | K9E201D33_2K04DTH |
| 0,47      | 44 | 29,9        | 23,4            | 34,6 | 1,2  | 1000          | 470          | 12                      | 5,0                | K9E201D47_2K04DTH |
| 0,56      | 44 | 32,4        | 25,9            | 37,1 | 1,2  | 1000          | 560          | 12                      | 4,9                | K9E201D56_2K04DTH |
| 0,56      | 57 | 26,5        | 20,1            | 31,3 | 1,2  | 640           | 358          | 12                      | 5,5                | K9E201D56_2K05DTH |
| 0,68      | 57 | 29,1        | 22,7            | 33,9 | 1,2  | 640           | 435          | 12                      | 5,1                | K9E201D68_2K05DTH |
| 1,0       | 57 | 35,1        | 28,6            | 39,8 | 1,2  | 640           | 640          | 12                      | 4,8                | K9E2011D0_2K05DTH |
| 1,2       | 57 | 38,3        |                 |      | 1,2  | 640           | 768          | 12                      | 4,8                | K9E2011D2R2K05383 |
| 1,5       | 57 | 42,8        |                 |      | 1,2  | 640           | 960          | 12                      | 4,6                | K9E2011D5R2K05428 |

Un 2000VDC  
Urms 630VAC  
Us 3000V

## K9E TYPE STANDARD RATINGS

| Cap<br>µF | L  | Lengtht (mm) |                 |      |      | du/dt | Ipeak | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|--------------|-----------------|------|------|-------|-------|-------------------------|--------------------|-------------------|
|           |    | D<br>round   | T<br>elliptical | H    | d    | V/µs  | (A)   |                         |                    |                   |
| 0,022     | 32 | 6,9          | 13,3            | 0,8  | 2150 | 47    | 2,6   | 40,5                    | K9E25122ME8K03BI3  |                   |
| 0,033     | 32 | 8,2          | 16,2            | 0,8  | 2150 | 71    | 3,5   | 36,9                    | K9E25133ME8K03DL1  |                   |
| 0,047     | 32 | 15,0         | 10,3            | 18,3 | 0,8  | 2150  | 101   | 4,5                     | 23,8               | K9E25147M_8K03DTH |
| 0,068     | 32 | 17,3         | 13,0            | 21,0 | 1,0  | 2150  | 146   | 5,9                     | 21,5               | K9E25168M_0K03DTH |
| 0,10      | 32 | 21,3         | 15,0            | 26,2 | 1,0  | 2150  | 215   | 7,8                     | 12,5               | K9E251D10_0K03DTH |
| 0,10      | 44 | 16,9         | 12,1            | 20,1 | 1,0  | 1350  | 135   | 5,9                     | 17,7               | K9E251D10_0K04DTH |
| 0,15      | 44 | 20,4         | 15,6            | 23,6 | 1,0  | 1350  | 203   | 7,9                     | 11,6               | K9E251D15_0K04DTH |
| 0,22      | 44 | 24,4         | 18,1            | 29,3 | 1,2  | 1350  | 297   | 10,7                    | 10,3               | K9E251D22_2K04DTH |
| 0,33      | 44 | 29,6         | 23,2            | 34,4 | 1,2  | 1350  | 446   | 12                      | 10,0               | K9E251D33_2K04DTH |
| 0,33      | 57 | 24,7         | 18,3            | 29,5 | 1,2  | 880   | 290   | 12                      | 6,8                | K9E251D33_2K05DTH |
| 0,47      | 57 | 29,2         | 22,8            | 34,0 | 1,2  | 880   | 414   | 12                      | 6,5                | K9E251D47_2K05DTH |
| 0,68      | 57 | 34,9         | 28,4            | 39,6 | 1,2  | 880   | 598   | 12                      | 6,0                | K9E251D68_2K05DTH |
| 0,82      | 57 | 38,3         |                 |      | 1,2  | 880   | 722   | 12                      | 5,6                | K9E251D82R2K05DTH |
| 1,0       | 57 | 42,2         |                 |      | 1,2  | 880   | 880   | 12                      | 5,4                | K9E2511D0R2K05DTH |

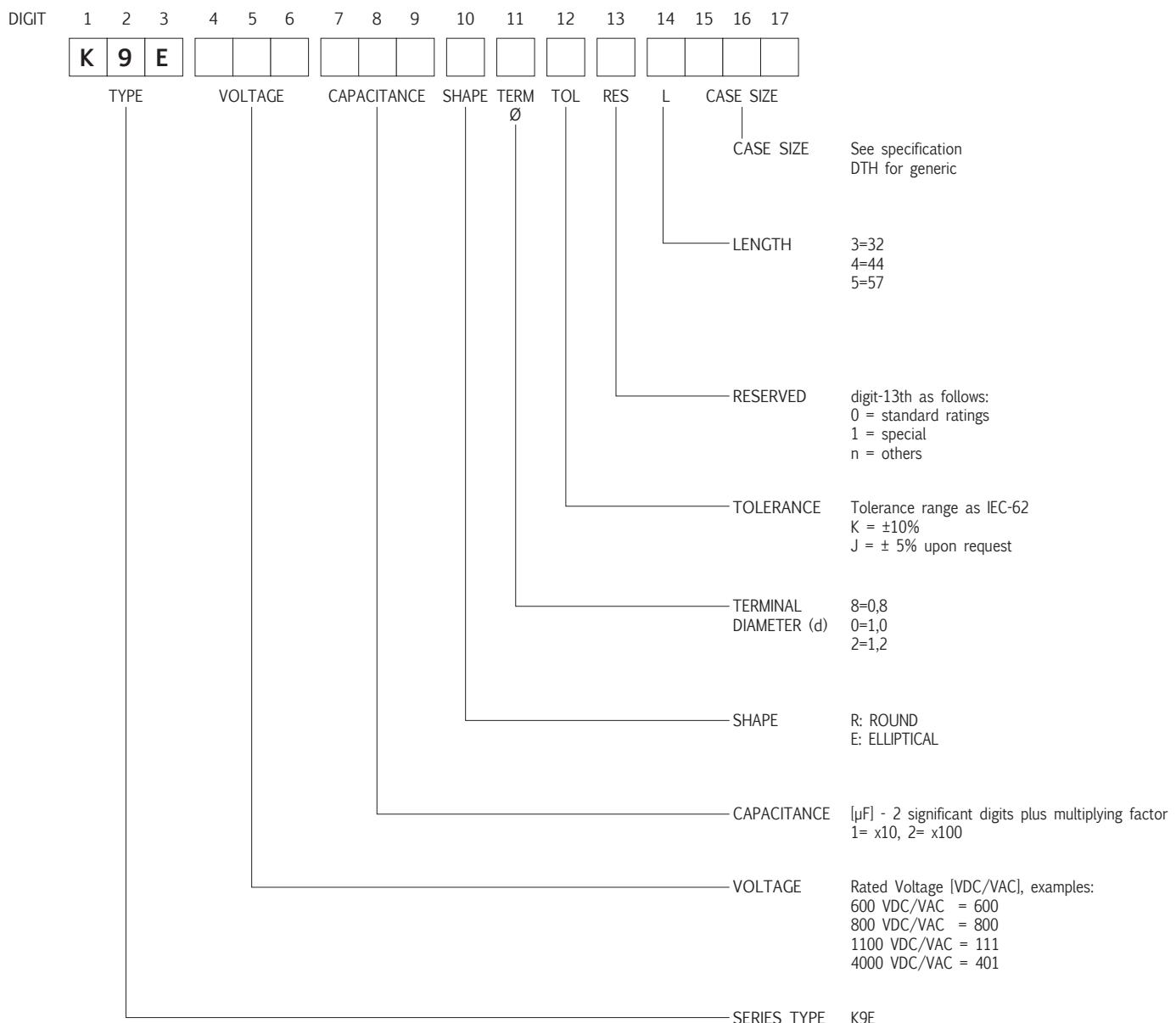
Un 2500VDC  
Urms 700VAC  
Us 3750V

| Cap<br>µF | L  | Lengtht (mm) |                 |      |      | du/dt | Ipeak | IMax@60°C<br>@10KHz (A) | ESR<br>@10KHz (mΩ) | PART NUMBER       |
|-----------|----|--------------|-----------------|------|------|-------|-------|-------------------------|--------------------|-------------------|
|           |    | D<br>round   | T<br>elliptical | H    | d    | V/µs  | (A)   |                         |                    |                   |
| 0,0068    | 32 | 5,1          | 9,9             | 0,8  | 2750 | 19    | 1,4   | 104,0                   | K9E3016M8E8K03BI3  |                   |
| 0,010     | 32 | 5,9          | 12,3            | 0,8  | 2750 | 28    | 1,9   | 79,4                    | K9E30110ME8K03DL1  |                   |
| 0,015     | 32 | 7,1          | 13,5            | 0,8  | 2750 | 41    | 2,5   | 75,5                    | K9E30115ME8K03DTH  |                   |
| 0,022     | 32 | 13,1         | 8,4             | 16,4 | 0,8  | 2750  | 61    | 3,1                     | 63,9               | K9E30122M_8K03DTH |
| 0,033     | 32 | 15,7         | 11,0            | 19,0 | 1,0  | 2750  | 91    | 4,1                     | 33,9               | K9E30133M_0K03DTH |
| 0,047     | 32 | 18,4         | 13,7            | 21,7 | 1,0  | 2750  | 129   | 5,4                     | 25,7               | K9E30147M_0K03DTH |
| 0,047     | 44 | 14,7         | 10,0            | 18,0 | 1,0  | 1600  | 75    | 4,3                     | 37,4               | K9E30147M_0K04DTH |
| 0,068     | 44 | 17,3         | 12,6            | 20,6 | 1,0  | 1600  | 109   | 5,6                     | 25,1               | K9E30168M_0K04DTH |
| 0,10      | 44 | 20,7         | 14,5            | 25,7 | 1,2  | 1600  | 160   | 7,4                     | 17,4               | K9E301D10_2K04DTH |
| 0,15      | 44 | 25,1         | 18,8            | 30,0 | 1,2  | 1600  | 240   | 10,0                    | 16,8               | K9E301D15_2K04DTH |
| 0,22      | 44 | 30,2         | 23,7            | 34,9 | 1,2  | 1600  | 352   | 12                      | 17,4               | K9E301D22_2K04DTH |
| 0,22      | 57 | 25,1         | 18,8            | 30,0 | 1,2  | 990   | 218   | 11,3                    | 12,6               | K9E301D22_2K05DTH |
| 0,33      | 57 | 30,5         | 24,1            | 35,3 | 1,2  | 990   | 327   | 12                      | 8,0                | K9E301D33_2K05DTH |
| 0,39      | 57 | 33,1         | 26,6            | 37,8 | 1,2  | 990   | 386   | 12                      | 7,4                | K9E301D39_2K05DTH |
| 0,47      | 57 | 36,3         |                 |      | 1,2  | 990   | 465   | 12                      | 5,7                | K9E301D47R2K05363 |
| 0,68      | 57 | 43,4         |                 |      | 1,2  | 990   | 673   | 12                      | 5,5                | K9E301D68R2K05434 |

Un 3000VDC  
Urms 750VAC  
Us 4500V

## PART NUMBER SYSTEM FOR METALLIZED POLYPROPYLENE DC-LINK CAPACITORS

Total length is 17 digits







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