

Metallized Polypropylene (PP) - Capacitors for DC-Link Applications. Capacitances from 35 μF to 200 μF . Rated Voltages from 700 VDC to 1500 VDC.

Special Features

- Very high volume/capacitance ratio
- Self-healing properties
- With cylindrical plastic case and screw fixing
- Dry construction without electrolyte or oil
- No internal fuse required
- Negative capacitance change versus temperature
- Very low dielectric absorption
- According to RoHS 2011/65/EU
- Customer-specific capacitances or voltages on request

Typical Applications

DC capacitors with high capacitances for applications in power electronics also at non-sinusoidal voltages and currents e.g. in

- Wind power systems
- Inverters

Construction

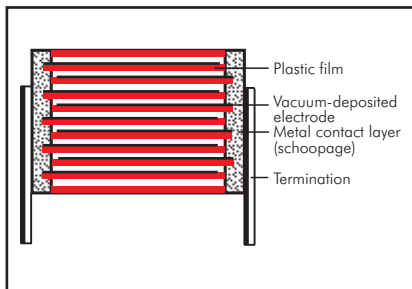
Dielectric:

Polypropylene (PP) film

Capacitor electrodes:

Vacuum-deposited

Internal construction:



Encapsulation:

Solvent-resistant, flame-retardant plastic case with PU-sealing and screw fixing, UL 94 V-0

Terminations:

Screw connection (male or female).

Marking:

Colour: Black. Marking: Gold.

Electrical Data

Capacitance range: 35 μF to 200 μF

Rated voltages: 700 VDC, 900 VDC, 1100 VDC, 1300 VDC, 1500 VDC

Capacitance tolerances: $\pm 20\%$, $\pm 10\%$, ($\pm 5\%$ available subject to special enquiry)

Operating temperature range:

-40°C to $+85^\circ\text{C}$

Insulation resistance at $+20^\circ\text{C}$:

≥ 5000 sec ($\text{M}\Omega \times \mu\text{F}$)

Measuring voltage: 100 V/1 min.

Dielectric loss factor

$\tan \delta_0: 2 \times 10^{-4}$

Test voltage: $1.5 U_r$, 2sec

Dielectric absorption:

0.05 %

Reliability:

Operational life $> 100\,000$ hours

Failure rate < 50 fit (hot spot $\leq 70^\circ\text{C}$)

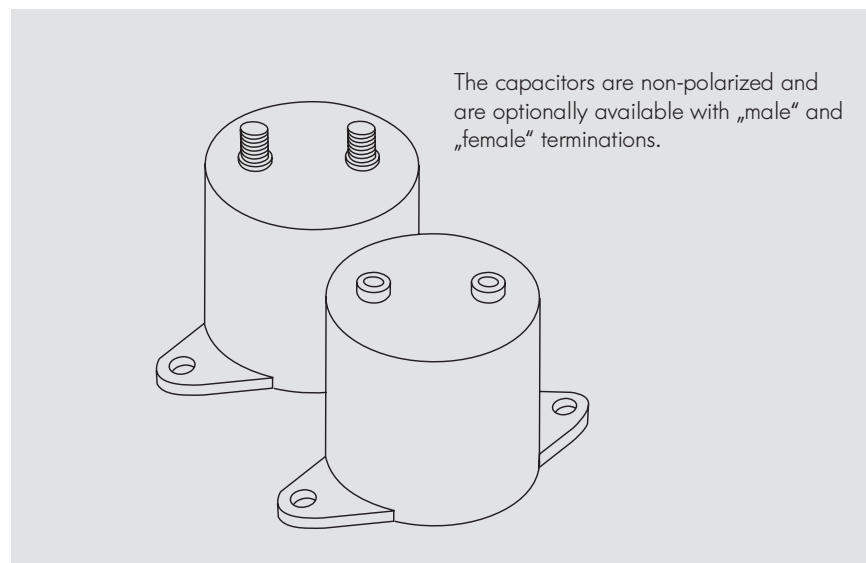
Mounting Recommendation

Excessive mechanical strain, e.g. pressure or shock onto the capacitor body, is to be avoided during mounting and usage of the capacitors.

Packing

Transport-safe packing in cardboard boxes.

For further details and graphs please refer to Technical Information.



Continuation

General Data

| U_R | C_N | D x L mm | I_{rms} (1 kHz)* A | ESR (1 kHz)* m Ω | R_{th} K/W | L_e nH | Approx. weight g | Part number |
|----------|-------------|-------------|-------------------------|----------------------------|-----------------|-------------|---------------------|----------------------|
| 700 VDC | 150 μ F | 84.5 x 51 | 100 | 0.9 | 7.0 | < 32 | 430 | DCP3K06150G100_----- |
| | 200 " | 84.5 x 64 | 100 | 1.0 | 8.5 | < 40 | 510 | DCP3K06200G200_----- |
| 900 VDC | 100 μ F | 84.5 x 51 | 90 | 1.0 | 7.2 | < 30 | 430 | DCP3N06100G100_----- |
| | 140 " | 84.5 x 64 | 100 | 1.3 | 8.5 | < 40 | 510 | DCP3N06140G200_----- |
| 1100 VDC | 70 μ F | 84.5 x 51 | 100 | 1.1 | 7.0 | < 32 | 430 | DCP3P05700G100_----- |
| | 90 " | 84.5 x 64 | 100 | 1.2 | 8.5 | < 40 | 510 | DCP3P05900G200_----- |
| 1300 VDC | 50 μ F | 84.5 x 51 | 60 | 1.7 | 7.0 | < 35 | 430 | DCP3R25500G100_----- |
| | 70 " | 84.5 x 64 | 50 | 2.1 | 8.5 | < 40 | 510 | DCP3R25700G200_----- |
| 1500 VDC | 35 μ F | 84.5 x 51 | 60 | 1.7 | 7.0 | < 35 | 430 | DCP3S05350G100_----- |
| | 50 " | 84.5 x 64 | 70 | 1.9 | 8.5 | < 40 | 510 | DCP3S05500G200_----- |

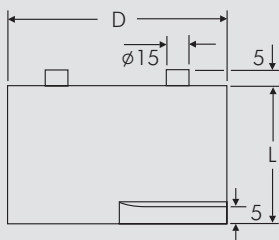
Contacts can handle: peak currents \hat{I} up to 5 kA
surge currents I_S up to 20 kA

Customer-specific capacitances or voltages on request

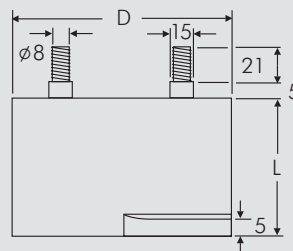
* General guide

Dims. in mm.

female

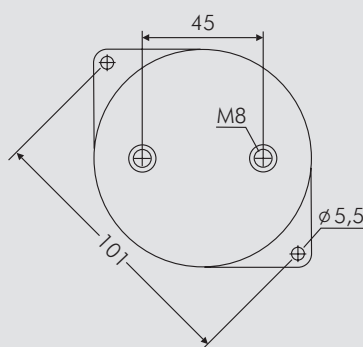
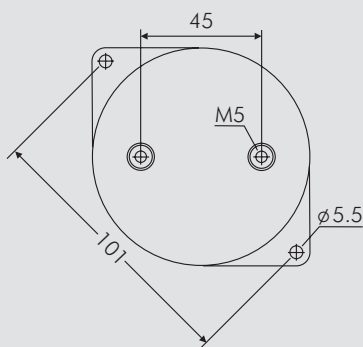


male



Part number completion:

Tolerance: 20 % = M
10 % = K
5 % = J
Packing: bulk = S
Connection: male = 0M
female = 0F



| D | L |
|------|----|
| 84.5 | 51 |
| 84.5 | 64 |

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