

## Metallized Polypropylene (PP) Capacitors in Cylindrical Case for DC-Link Applications

### Special Features

- Very high volume/capacitance ratio
- Self-healing
- Cylindrical capacitor body with axial screw and thread connections size M6 or M8
- Internal series connection from 850 VDC
- Very low dissipation factor
- Negative capacitance change versus temperature
- Very low dielectric absorption
- According to RoHS 2002/95/EC

### Typical Applications

As intermediate circuit capacitor e.g. in high power converter technology

### Construction

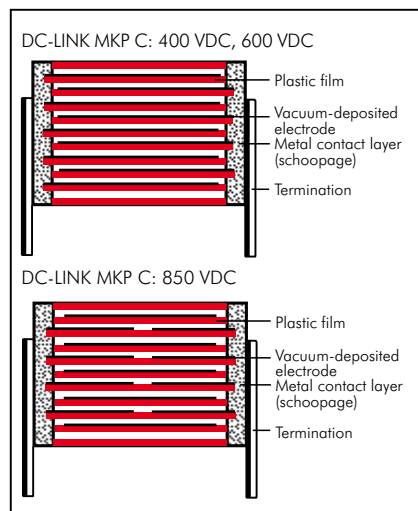
#### Dielectric:

Polypropylene (PP) film

#### Capacitor electrodes:

Vacuum-deposited

#### Internal construction:



#### Encapsulation:

Solvent-resistant, flame-retardant plastic case with PU seal, UL 94 V-0

#### Terminations:

Axial screw connection M6 or M8.

#### Marking:

Colour: Black. Marking: Gold.

### Electrical Data

#### Capacitance range:

30  $\mu$ F to 250  $\mu$ F

#### Rated voltages:

400 VDC, 600 VDC, 850 VDC

#### Capacitance tolerances:

$\pm 20\%$ ,  $\pm 10\%$ ,  $\pm 5\%$ ,

#### Operating temperature range:

$-40^\circ\text{C}$  to  $+85^\circ\text{C}$

#### Climatic test category:

40/085/56 in accordance with IEC

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

$\geq 10\,000$  sec ( $M\Omega \times \mu\text{F}$ )

(mean value: 50 000 sec)

Measuring voltage: 100 V/1 min.

#### Dissipation factors at $+20^\circ\text{C}$ :

$\tan \delta \leq 15 \times 10^{-4}$  at 1 kHz

#### Test voltage:

$1.2 U_r$ , 2sec

#### Dielectric absorption:

0.05 %

#### Voltage derating:

A voltage derating factor of 1.35 % per K must be applied from  $+65^\circ\text{C}$  for DC voltages.

#### Reliability:

Operational life > 200 000 hours

Failure rate < 2 fit ( $0.5 \times U_r$  and  $40^\circ\text{C}$ )

#### Specific dissipation:

Box size W x L in mm	Specific dissipation in Watts per K above the ambient temperature
60 x 49	0.186
70 x 49	0.231
80 x 49	0.280
90 x 49	0.333
90 x 58	0.364
90 x 97	0.501

### 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. When fixing the capacitor the screw torque is to be limited to max. 5 Nm.

For further details and graphs please refer to Technical Information.

### Packing

Transportation-safe packing in cardboard boxes.

#### Packing units

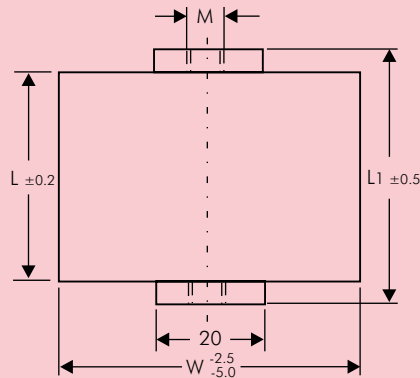
W	pcs. per packing unit
60	12
70	8
80	6
90	6

## Continuation

### General Data

Capacitance	400 VDC W x L	600 VDC W x L	850 VDC W x L
30 $\mu$ F		60 x 49	
40 "		70 x 49	
50 "	60 x 49	70 x 49	90 x 97
60 "	60 x 49	80 x 49	90 x 97
70 "	60 x 49	80 x 49	90 x 97
80 "	60 x 49	90 x 49	90 x 97
90 "	70 x 49	90 x 49	90 x 97
100 $\mu$ F	70 x 49	90 x 58	90 x 97
110 "	70 x 49	90 x 58	90 x 97
120 "	70 x 49	90 x 58	
130 "	80 x 49		
140 "	80 x 49		
150 "	80 x 49		
160 "	80 x 49		
170 "	90 x 49		
180 "	90 x 49		
190 "	90 x 49		
200 $\mu$ F	90 x 49		
200 "	90 x 58		
220 "	90 x 58		
230 "	90 x 58		
240 "	90 x 58		
250 "	90 x 58		

Dims. in mm.



W	L	L1	M
60	49	55	M6
70	49	55	M6
80	49	55	M8
90	49	55	M8
90	58	64	M8
90	97	103	M8

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