

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

Special Features

- Very high volume/capacitance ratio
- Self-healing properties
- With cylindrical aluminium case for bus bar mounting
- Dry construction without electrolyte or oil
- No internal fuse required
- Negative capacitance change versus temperature
- Very low dielectric absorption
- According to RoHS 2002/95/EC

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

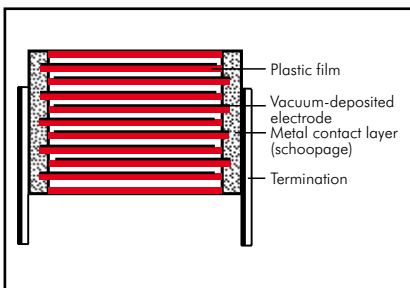
Dielectric:

Polypropylene (PP) film

Capacitor electrodes:

Vacuum-deposited

Internal construction:



Encapsulation:

Aluminium case with PU-sealing, UL 94 V-0

Terminations:

Screw connection (male or female), screw bolt M12 x 16.

Marking:

Colour: Metallic. Marking: Black on silver label.

Electrical Data

Capacitance range: 165 µF to 1560 µF

Rated voltages: 600 VDC, 700 VDC, 900 VDC, 1100 VDC, 1300 VDC, 1500 VDC

Capacitance tolerances: ±20%, ±10% (±5% available subject to special enquiry)

Operating temperature range:

-40° C to +85° C

Insulation resistance at +20° C:

≥ 5 000 sec (MΩ x µF)

(mean value: 20 000 sec)

Measuring voltage: 100 V/1 min.

Dielectric loss factor $\tan \delta_0$:

2×10^{-4}

Test voltage: 1.5 U_r , 2sec

Dielectric absorption:

0.05 %

Reliability:

Operational life > 100 000 hours

Failure rate < 50 fit (hot spot ≤ 70° C)

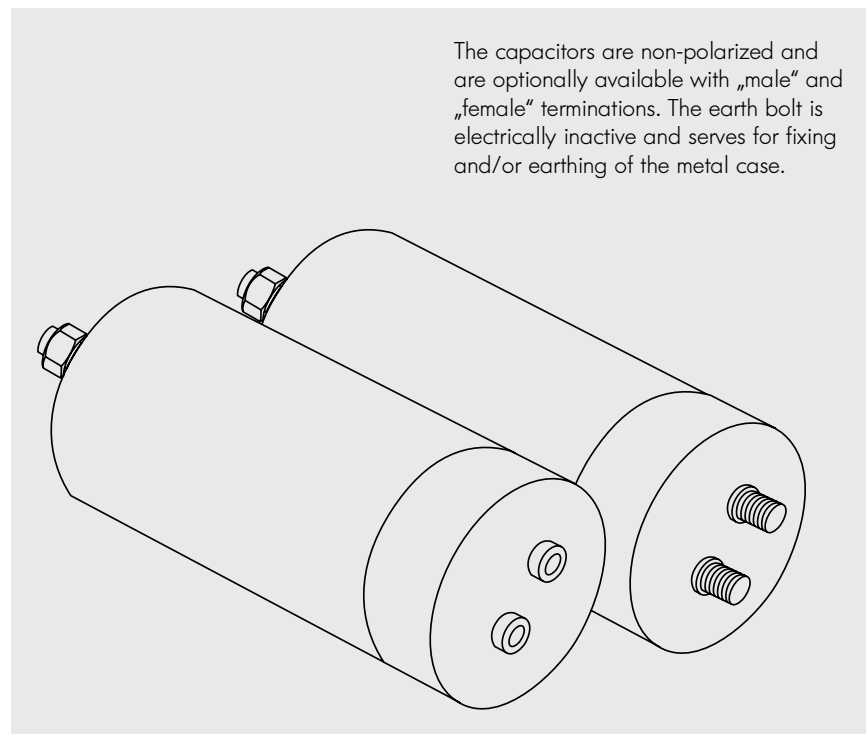
Mounting Recommendation

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

Packing

Transportation-safe packing in cardboard boxes.

For further details and graphs please refer to Technical Information.



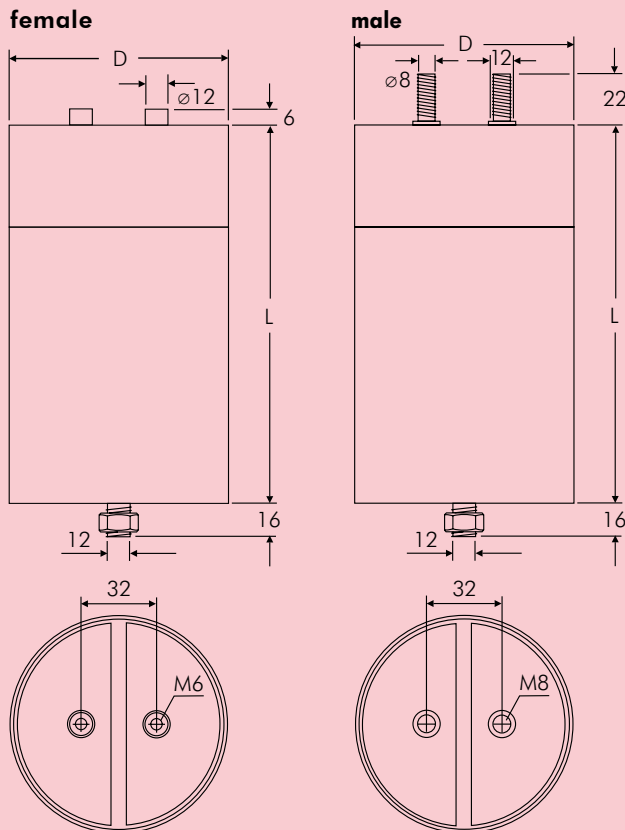
Continuation

General Data

U_R	C_N	D x L mm	I_{rms} (max.) [*] A	ESR (1 kHz) [*] mΩ	R_{th} K/W	L_e nH	Approx. weight g	Part number
600 VDC	780 μF	85 x 120	30	1.6	5.3	≤ 60	700	DCP6I06780E000_
	1000 "	85 x 132	35	1.7	4.2	≤ 60	850	DCP6I07100E100_
	1560 "	85 x 210	60	1.3	2.7	≤ 60	1400	DCP6I07156E200_
700 VDC	585 μF	85 x 120	30	1.7	5.3	≤ 60	700	DCP6K06585E000_
	750 "	85 x 132	35	1.9	4.2	≤ 60	850	DCP6K06750E100_
	1170 "	85 x 210	60	1.3	2.7	≤ 60	1400	DCP6K07117E200_
900 VDC	480 μF	85 x 120	30	1.7	5.3	≤ 60	700	DCP6N06480E000_
	550 "	85 x 132	36	1.8	4.2	≤ 60	850	DCP6N06550E100_
	900 "	85 x 210	60	1.5	2.7	≤ 60	1400	DCP6N06900E200_
1100 VDC	325 μF	85 x 120	30	1.8	5.3	≤ 60	700	DCP6P06325E000_
	420 "	85 x 132	40	1.9	4.2	≤ 60	850	DCP6P06420E100_
	650 "	85 x 210	60	1.3	2.7	≤ 60	1400	DCP6P06650E200_
1300 VDC	215 μF	85 x 120	30	1.8	5.3	≤ 60	700	DCP6R26215E000_
	270 "	85 x 132	40	2.4	4.2	≤ 60	850	DCP6R26270E100_
	430 "	85 x 210	60	1.5	2.7	≤ 60	1400	DCP6R26430E200_
1500 VDC	165 μF	85 x 120	30	2.2	5.3	≤ 60	700	DCP6S06165E000_
	210 "	85 x 132	40	2.5	4.2	≤ 60	850	DCP6S06210E100_
	330 "	85 x 210	60	1.7	2.7	≤ 60	1400	DCP6S06330E200_

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

* General guide



Part number completion:

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

D	L
85	120
85	132
85	210

Dims. in mm.

Customized capacitances or voltages
on request.

Rights reserved to amend design data without prior notification.



A WIMA part number consists of 18 digits and is composed as follows:

- Field 1 - 4: Type description
- Field 5 - 6: Rated voltage
- Field 7 - 10: Capacitance
- Field 11 - 12: Size and PCM
- Field 13 - 14: Special features (e.g. Snubber versions)
- Field 15: Capacitance tolerance
- Field 16: Packing
- Field 17 - 18: Lead length (untaped)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
M	K	S	2	C	0	2	1	0	0	1	A	0	0	M	S	S	D
MKS 2				63 VDC		0.01 µF			2.5x6.5x7.2		-		20%	bulk	6 -2		

<p>Type description:</p> <p>SMD-PET = SMDT SMD-PPS = SMDI FKP 02 = FKP0 MKS 02 = MKS0 FKS 2 = FKS2 FKP 2 = FKP2 MKS 2 = MKS2 MKS 2 = MKP2 FKS 3 = FKS3 FKP 3 = FKP3 MKS 4 = MKS4 MKP 4 = MKP4 MKP 10 = MKP1 FKP 4 = FKP4 FKP 1 = FKP1 MKP-X2 = MKX2 MKP-X2 R = MKXR MKP-Y2 = MKY2 MP 3-X2 = MPX2 MP 3-X1 = MPX1 MP 3-Y2 = MPY2 MP 3R-Y2 = MPRY Snubber MKP = SNMP Snubber FKP = SNFP GTO MKP = GTOM DC-LINK MKP 4 = DCP4 DC-LINK MKP 5 = DCP5 DC-LINK MKP 6 = DCP6 DC-LINK HC = DCH_ SuperCap C = SCSC SuperCap MC = SCMC SuperCap R = SCSR SuperCap MR = SCMR</p>	<p>Rated voltage:</p> <p>2.5 VDC = A1 4 VDC = A2 14 VDC = A3 28 VDC = A4 40 VDC = A5 5 VDC = A6 50 VDC = B0 63 VDC = C0 100 VDC = D0 160 VDC = E0 250 VDC = F0 400 VDC = G0 450 VDC = H0 600 VDC = I0 630 VDC = J0 700 VDC = K0 800 VDC = L0 850 VDC = M0 900 VDC = N0 1000 VDC = O1 1100 VDC = P0 1200 VDC = Q0 1250 VDC = R0 1500 VDC = S0 1600 VDC = T0 2000 VDC = U0 2500 VDC = V0 3000 VDC = W0 4000 VDC = X0 6000 VDC = Y0 250 VAC = 0W 275 VAC = 1W 300 VAC = 2W 400 VAC = 3W 440 VAC = 4W 500 VAC = 5W</p>	<p>Capacitance:</p> <p>22 pF = 0022 47 pF = 0047 100 pF = 0100 150 pF = 0150 220 pF = 0220 330 pF = 0330 470 pF = 0470 680 pF = 0680 1000 pF = 1100 1500 pF = 1150 2200 pF = 1220 3300 pF = 1330 4700 pF = 1470 6800 pF = 1680 0.01 µF = 2100 0.022 µF = 2220 0.047 µF = 2470 0.1 µF = 3100 0.22 µF = 3220 0.47 µF = 3470 1 µF = 4100 2.2 µF = 4220 4.7 µF = 4470 10 µF = 5100 22 µF = 5220 47 µF = 5470 100 µF = 6100 220 µF = 6220 1 F = A010 2.5 F = A025 50 F = A500 100 F = B100 110 F = B110 600 F = B600 1200 F = C120 ...</p>	<p>Size:</p> <p>4.8x3.3x3 Size 1812 = KA 4.8x3.3x4 Size 1812 = KB 5.7x5.1x3.5 Size 2220 = QA 5.7x5.1x4.5 Size 2220 = QB 7.2x6.1x3 Size 2824 = TA 7.2x6.1x5 Size 2824 = TB 10.2x7.6x5 Size 4030 = VA 12.7x10.2x6 Size 5040 = XA 15.3x13.7x7 Size 6054 = YA 2.5x7x4.6 PCM 2.5 = 0B 3x7.5x4.6 PCM 2.5 = 0C 2.5x6.5x7.2 PCM 5 = 1A 3x7.5x7.2 PCM 5 = 1B 2.5x7x10 PCM 7.5 = 2A 3x8.5x10 PCM 7.5 = 2B 3x9x13 PCM 10 = 3A 4x9x13 PCM 10 = 3C 5x11x18 PCM 15 = 4B 6x12.5x18 PCM 15 = 4C 5x14x26.5 PCM 22.5 = 5A 6x15x26.5 PCM 22.5 = 5B 9x19x31.5 PCM 27.5 = 6A 11x21x31.5 PCM 27.5 = 6B 9x19x41.5 PCM 37.5 = 7A 11x22x41.5 PCM 37.5 = 7B 94x49x182 DCH_ = H0 94x77x182 DCH_ = H1 ...</p>	<p>Tolerance:</p> <p>20% = M 10% = K 5% = J 2.5% = H 1% = E ...</p> <p>Packing:</p> <p>AMMO H16.5 340x340 = A AMMO H16.5 490x370 = B AMMO H18.5 340x340 = C AMMO H18.5 490x370 = D REEL H16.5 360 = F REEL H16.5 500 = H REEL H18.5 360 = I REEL H18.5 500 = J ROLL H16.5 = N ROLL H18.5 = O BLISTER W12 180 = P BLISTER W12 330 = Q BLISTER W16 330 = R BLISTER W24 330 = T Bulk Standard = S TPS Standard = Y ...</p>	
				<p>Special features:</p> <p>Standard = 00 Version A1 = 1A Version A1.1.1 = 1B Version A1.2 = 1C ...</p>	<p>Lead length (untaped)</p> <p>3.5 ±0.5 = C9 6 -2 = SD 16 ±1 = P1 ...</p>

The data on this page is not complete and serves only to explain the part number system. Part number information is listed on the pages of the respective WIMA range.