

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

Special Features

- Very high volume/capacitance ratio
- Self-healing properties
- With cylindrical plastic case for PCB mounting
- 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, UL 94 V-0

Terminations:

Tinned wire.

Marking:

Colour: Grey. Marking: Black on silver label.

Electrical Data

Capacitance range: 16 μF to 260 μF

Rated voltages: 500 VDC, 700 VDC, 900 VDC, 1100 VDC, 1300 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 ($\text{M}\Omega \times \mu\text{F}$)

(mean value: 20000 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 $\leq 70^\circ\text{C}$)

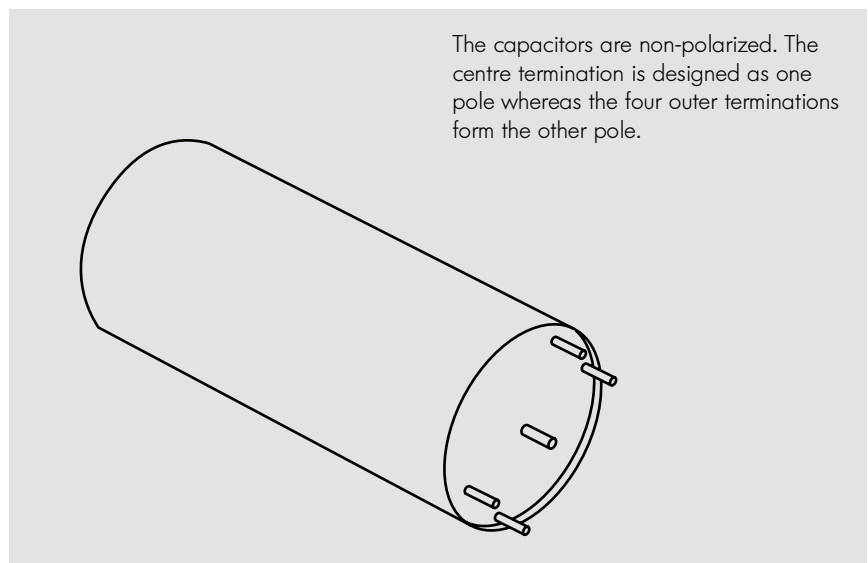
Mounting Recommendation

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

Packing

Transportation-safe packing in cardboard boxes.

For further details and graphs please refer to Technical Information.



Continuation

General Data

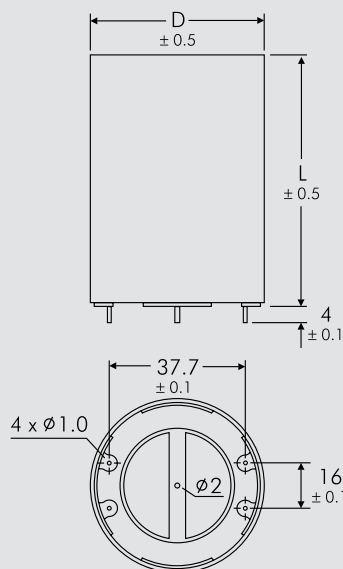
U_R	C_N	D x L mm	I_{rms} (1 kHz)* A	ESR (1 kHz)* m Ω	R_{th} K/W	L_e nH	Approx. weight g	Part number
500 VDC	85 μ F	50 x 57	35	2.0	11.0	< 45	120	DCP5H15850D000_-----
	195 "	50 x 95	32	3.4	7.5	< 65	190	DCP5H16195D100_-----
	260 "	50 x 120	30	5.2	6.0	< 85	220	DCP5H16260D200_-----
700 VDC	59 μ F	50 x 57	30	1.9	11.0	< 45	120	DCP5K05590D000_-----
	143 "	50 x 95	32	3.5	7.5	< 65	190	DCP5K06143D100_-----
	190 "	50 x 120	25	4.7	6.0	< 85	220	DCP5K06190D200_-----
900 VDC	53 μ F	50 x 57	35	2.3	11.0	< 45	120	DCP5N05530D000_-----
	114 "	50 x 95	32	4.2	7.5	< 65	190	DCP5N06114D100_-----
	158 "	50 x 120	30	6.0	6.0	< 85	220	DCP5N06158D200_-----
1100 VDC	30 μ F	50 x 57	20	2.8	11.0	< 45	120	DCP5P05300D000_-----
	72 "	50 x 95	25	4.5	7.5	< 65	190	DCP5P05720D100_-----
	100 "	50 x 120	25	6.1	6.0	< 85	220	DCP5P06100D200_-----
1300 VDC	16 μ F	50 x 57	20	3.0	11.0	< 45	120	DCP5R25160D000_-----
	40 "	50 x 95	25	5.7	7.5	< 65	190	DCP5R25400D100_-----
	55 "	50 x 120	25	7.7	6.0	< 85	220	DCP5R25550D200_-----

Contacts can handle: peak currents \hat{I} up to 1.1 kA
surge currents I_S up to 3.5 kA

Customer-specific capacitances or voltages on request

* General guide

Dims. in mm.



D	L
50	57
50	95
50	120

Part number completion:

Tolerance: 20 % = M
10 % = K
5 % = J
Packing: bulk = S
Pin length: none = 00

Rights reserved to amend design data without prior notification.



WIMA Part Number System

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: Version code (e.g. Snubber versions)
- Field 15: Capacitance tolerance
- Field 16: Packing
- Field 17 - 18: Pin 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 μ F			2.5x6.5x7.2		-	20%	bulk	6-2			
Type description:				Rated voltage:		Capacitance:			Size:		Tolerance:			Packing:			
SMD-PET = SMDT				50 VDC = B0		22 pF = 0022			4.8x3.3x3 Size 1812 = KA		±20% = M			Packing: 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/TPS Standard = S ...			
SMD-PEN = SMDN				63 VDC = C0		47 pF = 0047			4.8x3.3x4 Size 1812 = KB		±10% = K						
SMD-PPS = SMDI				100 VDC = D0		100 pF = 0100			5.7x5.1x3.5 Size 2220 = QA		±5% = J						
FKP 02 = FKPO				250 VDC = F0		150 pF = 0150			5.7x5.1x4.5 Size 2220 = QB		±2.5% = H						
MKS 02 = MKS0				400 VDC = G0		220 pF = 0220			7.2x6.1x3 Size 2824 = TA		±1% = E						
FKS 2 = FKS2				450 VDC = H0		330 pF = 0330			7.2x6.1x5 Size 2824 = TB		...						
FKP 2 = FKP2				600 VDC = I0		470 pF = 0470			10.2x7.6x5 Size 4030 = VA								
MKS 2 = MKS2				630 VDC = J0		680 pF = 0680			12.7x10.2x6 Size 5040 = XA								
MKP 2 = MKP2				700 VDC = K0		1000 pF = 1100			15.3x13.7x7 Size 6054 = YA								
FKS 3 = FKS3				800 VDC = L0		1500 pF = 1150			2.5x7x4.6 PCM 2.5 = 0B								
FKP 3 = FKP3				850 VDC = M0		2200 pF = 1220			3x7.5x4.6 PCM 2.5 = 0C								
MKS 4 = MKS4				900 VDC = N0		3300 pF = 1330			2.5x6.5x7.2 PCM 5 = 1A								
MKP 4 = MKP4				1000 VDC = O1		4700 pF = 1470			3x7.5x7.2 PCM 5 = 1B								
MKP 10 = MKP1				1100 VDC = P0		6800 pF = 1680			2.5x7x10 PCM 7.5 = 2A								
FKP 4 = FKP4				1200 VDC = Q0		0.01 μ F = 2100			3x8.5x10 PCM 7.5 = 2B								
FKP 1 = FKP1				1250 VDC = R0		0.022 μ F = 2220			3x9x13 PCM 10 = 3A								
MKP-X2 = MKX2				1500 VDC = S0		0.047 μ F = 2470			4x9x13 PCM 10 = 3C								
MKP-X2 R = MKXR				1600 VDC = T0		0.1 μ F = 3100			5x11x18 PCM 15 = 4B								
MKP-X1 R = MKX1				2000 VDC = U0		0.22 μ F = 3220			6x12.5x18 PCM 15 = 4C								
MKP-Y2 = MKY2				2500 VDC = V0		0.47 μ F = 3470			5x14x26.5 PCM 22.5 = 5A								
MP 3-X2 = MPX2				3000 VDC = W0		1 μ F = 4100			6x15x26.5 PCM 22.5 = 5B								
MP 3-X1 = MPX1				4000 VDC = X0		2.2 μ F = 4220			9x19x31.5 PCM 27.5 = 6A								
MP 3-Y2 = MPY2				6000 VDC = Y0		4.7 μ F = 4470			11x21x31.5 PCM 27.5 = 6B								
MP 3R-Y2 = MPRY				250 VAC = 0W		10 μ F = 5100			9x19x41.5 PCM 37.5 = 7A								
Snubber MKP = SNMP				275 VAC = 1W		22 μ F = 5220			11x22x41.5 PCM 37.5 = 7B								
Snubber FKP = SNFP				300 VAC = 2W		47 μ F = 5470			19x31x56 PCM 48.5 = 8D								
GTO MKP = GTOM				305 VAC = AW		100 μ F = 6100			35x50x57 PCM 52.5 = 9F								
DC-LINK MKP 3 = DCP3				400 VAC = 3W		220 μ F = 6220			...								
DC-LINK MKP 4 = DCP4				440 VAC = 4W		1000 μ F = 7100											
DC-LINK MKP 4S = DCP4S				500 VAC = 5W		1500 μ F = 7150											
DC-LINK MKP 5 = DCP5														
DC-LINK MKP 6 = DCP6																	
DC-LINK HC = DCHC																	
									Version code:		Pin length (untaped)						
									Standard = 00		3.5 ±0.5 = C9						
									Version A1 = 1A		6-2 = SD						
									Version A1.1.1 = 1B		16 ±1 = P1						
									Version A2 = 2A		...						
									...								

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.