WIMA DC-LINK MKP 5



Metallized Polypropylene (PP) - Capacitors in Cylindrical Case for DC-Link Applications. Capacitances from 16 μ F to 260 μ F. Rated Voltages from 500 VDC to 1300 VDC.

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

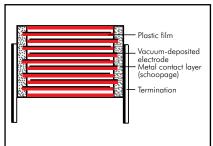
Dielectric:

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: $16 \mu F$ to $260 \mu F$ Rated voltages: 500 VDC, 700 VDC, 900 VDC, 1100 VDC, 1300 VDC

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

Operating temperature range:

-40° C to +85° C

Insulation resistance at +20° C:

 $\geqslant 5\,000$ sec (M Ω x $\mu\text{F})$ (mean value: 20 000 sec)

Measuring voltage: 100 V/1 min.

Dielectric loss factor tan δ_0 :

Test voltage: 1.5 U_n 2sec

Dielectric absorption:

0.05 %

Reliability:

Operational life $> 100\,000$ hours Failure rate < 50 fit (hot spot $\le 70^{\circ}$ C)

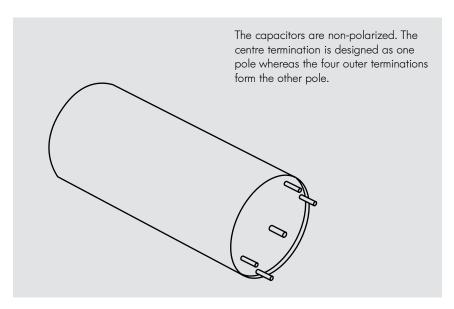
Mounting Recommendation

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.



WIMA DC-LINK MKP 5



Continuation

General Data

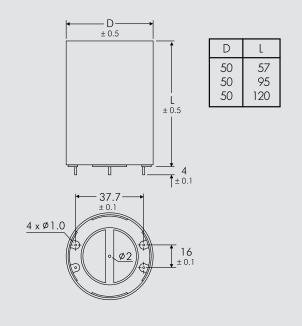
U _R	C _N	D x L mm	I _{rms} (1 kHz)* A	ESR (1 kHz)* mΩ	R _{th} K/W	L _e nH	Approx. weight g	Part number
500 VDC	85 µF	50 x 57	35	2.0	11.0	< 45	120	DCP5H15850D000
	195 "	50 x 95	32	3.4	7.5	< 65	190	DCP5H16195D100
	260 "	50 x 120	30	5.2	6.0	< 85	220	DCP5H16260D200
700 VDC	59 μF	50 x 57	30	1.9	11.0	< 45	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 μF	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 µF	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 μF	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 $\hat{1}$ 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.



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

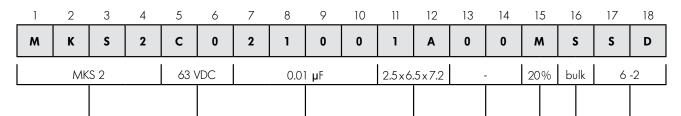
Field 11 - 12: Size and PCM

Field 13 - 14: Version code (e.g. Snubber versions)

Field 15: Capacitance tolerance

Packing Field 16:

Field 17 - 18: Pin length (untaped)



Type description:		Rated voltage:	Capacitance:	Size:	Tolerance:
SMD-PET	= SMDT	50 VDC = B0	22 pF = 0022	$4.8 \times 3.3 \times 3$ Size 1812 = KA	$\pm 20\% = M$
SMD-PEN	= SMDN	63 VDC = C0	47 pF = 0047	$4.8 \times 3.3 \times 4$ Size 1812 = KB	$\pm 10\% = K$
SMD-PPS	= SMDI	100 VDC = D0	100 pF = 0100	$5.7 \times 5.1 \times 3.5$ Size $2220 = QA$	$\pm 5\% = J$
FKP 02	= FKPO	250 VDC = FO	150 pF = 0150	$5.7 \times 5.1 \times 4.5$ Size $2220 = QB$	$\pm 2.5\% = H$
MKS 02	=MKS0	400 VDC = G0	220 pF = 0220	$7.2 \times 6.1 \times 3$ Size 2824 = TA	$\pm 1\% = E$
FKS 2	= FKS2	450 VDC = H0	330 pF = 0330	$7.2 \times 6.1 \times 5$ Size 2824 = TB	
FKP 2	= FKP2	520 VDC = H2	470 pF = 0470	$10.2 \times 7.6 \times 5$ Size $4030 = VA$	
FKS 3	= FKS3	600 VDC = 10	680 pF = 0680	$12.7 \times 10.2 \times 6$ Size $5040 = XA$	
FKP 3	= FKP 3	630 VDC = J0	1000 pF = 1100	$15.3 \times 13.7 \times 7$ Size $6054 = YA$	Packing:
MKS 2	=MKS2	700 VDC = KO	1500 pF = 1150	$2.5 \times 7 \times 4.6 \text{ PCM } 2.5 = 0B$	AMMO H16.5 $340 \times 340 = A$
MKP 2	=MKP2	800 VDC = 10	2200 pF = 1220	$3 \times 7.5 \times 4.6 \text{ PCM } 2.5 = 0 \text{C}$	AMMO H16.5 $490 \times 370 = B$
MKS 4	= MKS4	850 VDC = M0	3300 pF = 1330	$2.5 \times 6.5 \times 7.2 \text{ PCM}5 = 1 \text{A}$	AMMO H18.5 $340 \times 340 = C$
MKP 4C	= MKPC	900 VDC = N0	4700 pF = 1470	$3 \times 7.5 \times 7.2 \text{ PCM} 5 = 1B$	AMMO H18.5 $490 \times 370 = D$
MKP 4	=MKP4	1000 VDC = 01	6800 pF = 1680	$2.5 \times 7 \times 10 \text{ PCM} 7.5 = 2A$	REEL H16.5 360 = F
MKP 10	=MKP1	1100 VDC = P0	$0.01 \mu F = 2100$	$3 \times 8.5 \times 10 \text{ PCM } 7.5 = 2B$	REEL H16.5 500 = H
FKP 1	= FKP1	1200 VDC = Q0	$0.022 \mu F = 2220$	$3 \times 9 \times 13 \text{ PCM } 10 = 3A$	REEL H18.5 360 = I
MKP-X2	=MKX2	1250 VDC = RO	$0.047 \mu F = 2470$	$4 \times 9 \times 13 \text{ PCM } 10 = 3C$	REEL H18.5 500 = J
MKP-X1 R	=MKX1	1500 VDC = S0	$0.1 \mu F = 3100$	$5 \times 11 \times 18 \text{ PCM } 15 = 4B$	ROLL H16.5 $= N$
MKP-Y2	=MKY2	1600 VDC = T0	$0.22 \mu F = 3220$	$6 \times 12.5 \times 18 \text{ PCM } 15 = 4 \text{ C}$	ROLL H18.5 = O
MP 3-X2	=MPX2	2000 VDC = U0	$0.47 \mu F = 3470$	$5 \times 14 \times 26.5 \text{ PCM } 22.5 = 5A$	BLISTER W12 180 $= P$
MP 3-X1	=MPX1	2500 VDC = V0	$1 \mu F = 4100$	$6 \times 15 \times 26.5 \text{ PCM } 22.5 = 5B$	BLISTER W12 330 $= Q$
MP 3-Y2	=MPY2	3000 VDC = W0	$2.2 \mu F = 4220$	$9 \times 19 \times 31.5 \text{ PCM } 27.5 = 6A$	BLISTER W16 330 $=$ R
MP 3R-Y2	=MPRY	4000 VDC = X0	$4.7 \mu F = 4470$	$11 \times 21 \times 31.5 \text{ PCM } 27.5 = 6B$	BLISTER W24 330 $=$ T
MKP 4F	=MKPF	6000 VDC = Y0	$10 \mu F = 5100$	$9 \times 19 \times 41.5 \text{ PCM} 37.5 = 7A$	Bulk/TPS Standard = S
Snubber MKP	= SNMP	250 VAC = 0 VV	$22 \mu F = 5220$	$11 \times 22 \times 41.5 \text{ PCM} 37.5 = 7B$	
Snubber FKP	= SNFP	275 VAC = 1 W	$47 \mu F = 5470$	$19 \times 31 \times 56$ PCM $48.5 = 8D$	
GTO MKP	= GTOM	300 VAC = 2VV	$100 \mu F = 6100$	$25 \times 45 \times 57 \text{ PCM } 52.5 = 9D$	
DC-LINK MKP		305 VAC = AVV	$220 \mu F = 6220$		I
DC-LINK MKP 4 = DCP4		350 VAC = BW	$1000 \mu F = 7100$		
DC-LINK MKP 4S = DCPS DC-LINK MKP 5 = DCP5		$\begin{array}{ccc} 440 \text{ VAC} &= 4W \\ 500 \text{ VAC} &= 5W \end{array}$	$1500 \mu F = 7150$	Version code:	Pin length (untaped)
		500 VAC = 5W	•••	1	$3.5 \pm 0.5 = C9$
DC-LINK MKP	o = DCro			Standard = 00	3.3 ±0.3 = C9

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.

Version A1

Version A1.1.1 = 1BVersion A2

= 1A

=2A

DC-LINK HC

DC-LINK HY

= DCHC

= DCHY

6 - 2 = SD $16 \pm 1 = P1$

Pin length (taped)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

WIMA:

DCP5H15850D000KS00	DCP5H16195D100KS00	DCP5H16260D200KS00	DCP5K05590D000KS00
DCP5K06143D100KS00	DCP5K06190D200KS00	DCP5N05530D000KS00	DCP5N06114D100KS00
DCP5N06158D200KS00	DCP5P05300D000KS00	DCP5P05720D100KS00	DCP5P06100D200KS00
DCP5R25160D000KS00	DCP5R25400D100KS00	DCP5R25550D200KS00	