

## Metallized Polypropylene (PP) - Capacitors for DC-Link Applications. Capacitances from 35 $\mu\text{F}$ to 200 $\mu\text{F}$ . 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

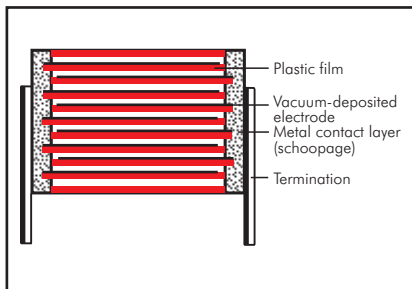
#### Dielectric:

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  $\mu\text{F}$  to 200  $\mu\text{F}$

**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:**

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

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

$\geq 5000$  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  $\leq 70^\circ\text{C}$ )

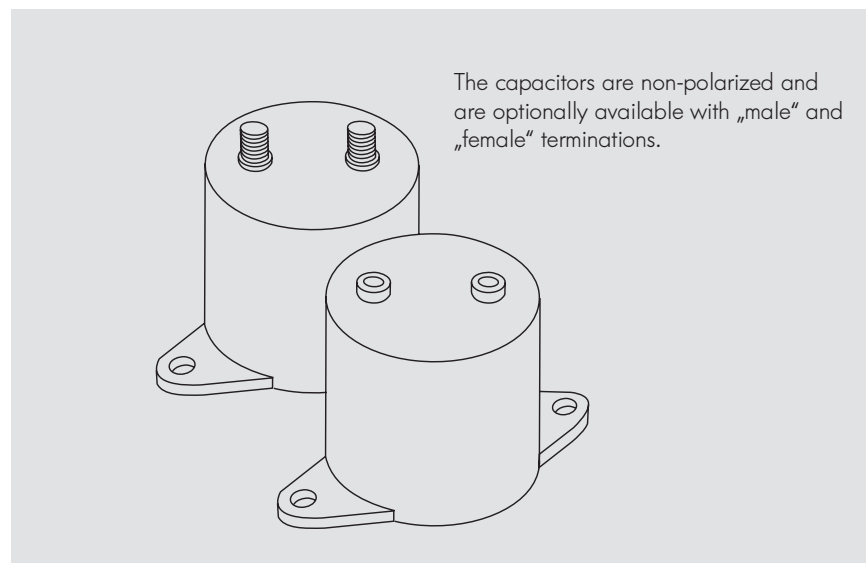
### Mounting Recommendation

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 $\Omega$	$R_{th}$ K/W	$L_e$ nH	Approx. weight g	Part number
700 VDC	150 $\mu$ 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 $\mu$ 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 $\mu$ 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 $\mu$ 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 $\mu$ 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_-----

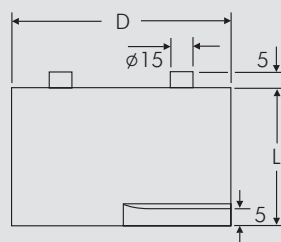
Contacts can handle: peak currents  $\hat{I}$  up to 5 kA  
surge currents  $I_S$  up to 20 kA

Customer-specific capacitances or voltages on request

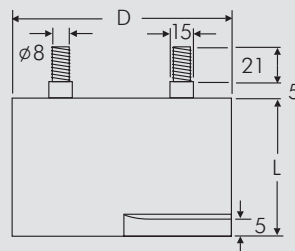
\* General guide

Dims. in mm.

female

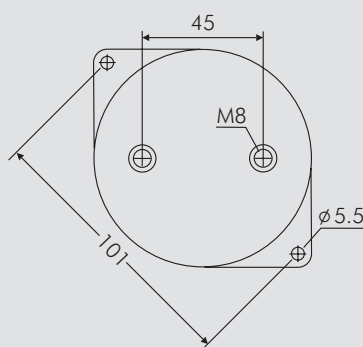
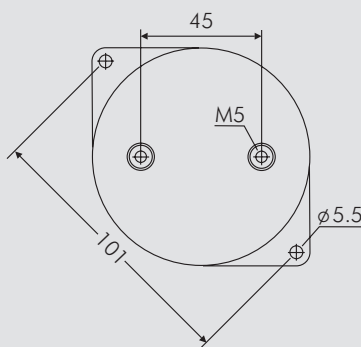


male



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

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: 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
<b>M</b>	<b>K</b>	<b>S</b>	<b>2</b>	<b>C</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>A</b>	<b>0</b>	<b>0</b>	<b>M</b>	<b>S</b>	<b>S</b>	<b>D</b>
MKS 2				63 VDC		0.01 µF			2.5x6.5x7.2		-		20%	bulk	6 -2		

<p><b>Type description:</b></p> <p>SMD-PET = SMDT                  SMD-PEN = SMDN                  SMD-PPS = SMDI                  FKP 02 = FKPO                  MKS 02 = MKS0                  FKS 2 = FKS2                  FKP 2 = FKP2                  FKS 3 = FKS3                  FKP 3 = FKP 3                  MKS 2 = MKS2                  MKP 2 = MKP2                  MKS 4 = MKS4                  MKP 4C = MKPC                  MKP 4 = MKP4                  MKP 10 = MKP1                  FKP 1 = FKP1                  MKP-X2 = MKX2                  MKP-X1 R = MKX1                  MKP-Y2 = MKY2                  MP 3-X2 = MPX2                  MP 3-X1 = MPX1                  MP 3-Y2 = MPY2                  MP 3R-Y2 = MPRY                  MKP 4F = MKPF                  Snubber MKP = SNMP                  Snubber FKP = SNFP                  GTO MKP = GTOM                  DC-LINK MKP 3 = DCP3                  DC-LINK MKP 4 = DCP4                  DC-LINK MKP 4S = DCP5                  DC-LINK MKP 5 = DCP5                  DC-LINK MKP 6 = DCP6                  DC-LINK HC = DCHC                  DC-LINK HY = DCHY</p>	<p><b>Rated voltage:</b></p> <p>50 VDC = B0                  63 VDC = C0                  100 VDC = D0                  250 VDC = F0                  400 VDC = G0                  450 VDC = H0                  520 VDC = H2                  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                  305 VAC = AW                  350 VAC = BW                  440 VAC = 4W                  500 VAC = 5W                  ...</p>	<p><b>Capacitance:</b></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                  1000 µF = 7100                  1500 µF = 7150                  ...</p>	<p><b>Size:</b></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                  19x31x56 PCM 48.5 = 8D                  25x45x57 PCM 52.5 = 9D                  ...</p> <p><b>Version code:</b></p> <p>Standard = 00                  Version A1 = 1A                  Version A1.1.1 = 1B                  Version A2 = 2A                  ...</p>	<p><b>Tolerance:</b></p> <p>±20% = M                  ±10% = K                  ±5% = J                  ±2.5% = H                  ±1% = E                  ...</p> <p><b>Packing:</b></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/TPS Standard = S                  ...</p> <p><b>Pin length (untaped)</b></p> <p>3.5 ±0.5 = C9                  6 -2 = SD                  16 ±1 = P1                  ...</p> <p><b>Pin length (taped)</b></p> <p>none = 00</p>
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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.