

Metallized Polyester (PET) Capacitors in PCM 2.5 mm.

Capacitances from 3300 pF to 1.0 µF. Rated Voltages from 63 VDC to 400 VDC.

Special Features

- High volume/capacitance ratio and reduced base
- PCM 2.5 mm
- Self-healing
- According to RoHS 2011/65/EU

Typical Applications

For general DC-applications e.g.

- By-pass
- Blocking
- Coupling and decoupling
- Timing

Construction

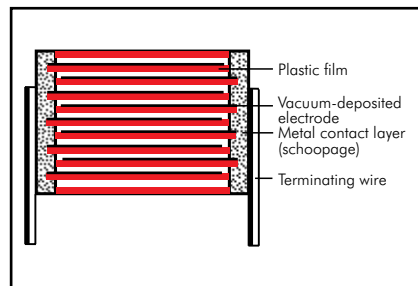
Dielectric:

Polyethylene-terephthalate (PET) film

Capacitor electrodes:

Vacuum-deposited

Internal construction:



Encapsulation:

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

Terminations:

Tinned wire.

Marking:

Colour: Red. Marking: Silver.

Electrical Data

Capacitance range:

3300 pF to 1.0 µF (E12-values on request)

Rated voltages:

63 VDC, 100 VDC, 250 VDC, 400 VDC

Capacitance tolerances:

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

Operating temperature range:

−55° C to +100° C

Test specifications:

In accordance with IEC 60384-2

Climatic test category:

55/100/21 in accordance with IEC

Insulation resistance at +20° C:

U_r	U_{test}	$C \leq 0.33 \mu F$	$0.33 \mu F < C \leq 1.0 \mu F$
63 VDC	50 V	$\geq 3.75 \times 10^3 M\Omega$	$\geq 1250 \text{ sec } (M\Omega \times \mu F)$
$\geq 100 \text{ VDC}$	100 V	$\geq 1 \times 10^4 M\Omega$	–

Measuring time: 1 min.

Test voltage: $1.6 U_r$, 2 sec.

Maximum pulse rise time:

Capacitance pF/µF	Pulse rise time V/µsec max. operation/test
3300 ... 6800	100 / 1000
0.01 ... 0.022	50 / 500
0.033 ... 0.068	30 / 300
0.1 ... 0.33	20 / 200
0.47 ... 1.0	15 / 150

for pulses equal to the rated voltage

Dissipation factors at +20° C: $\tan \delta$

at f	$C \leq 0.1 \mu F$	$0.1 \mu F < C \leq 1.0 \mu F$
1 kHz	$\leq 8 \times 10^{-3}$	$\leq 8 \times 10^{-3}$
10 kHz	$\leq 15 \times 10^{-3}$	$\leq 15 \times 10^{-3}$
100 kHz	$\leq 30 \times 10^{-3}$	–

Voltage derating:

A voltage derating factor of 1.25 % per K must be applied from +85° C for DC voltages and from +75° C for AC voltages.

Reliability:

Operational life > 300 000 hours

Failure rate < 2 fit ($0.5 \times U_r$ and 40° C)

Mechanical Tests

Pull test on pins:

10 N in direction of pins according to IEC 60068-2-21

Vibration:

6 hours at 10...2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 60068-2-6

Low air density:

1kPa = 10 mbar in accordance with IEC 60068-2-13

Bump test:

4000 bumps at 390 m/sec² in accordance with IEC 60068-2-29

Packing

Available taped and reeled.

Detailed taping information and graphs at the end of the catalogue.

For further details and graphs please refer to Technical Information.

Continuation

General Data

Capacitance	63 VDC/40 VAC*					100 VDC/63 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
0.01 μF	2.5	7	4.6	2.5	MKS0C021000B00_	2.5	7	4.6	2.5	MKS0D021000B00_
0.015 "	2.5	7	4.6	2.5	MKS0C021500B00_	2.5	7	4.6	2.5	MKS0D021500B00_
0.022 "	2.5	7	4.6	2.5	MKS0C022200B00_	2.5	7	4.6	2.5	MKS0D022200B00_
0.033 "	2.5	7	4.6	2.5	MKS0C023300B00_	2.5	7	4.6	2.5	MKS0D023300B00_
0.047 "	2.5	7	4.6	2.5	MKS0C024700B00_	2.5	7	4.6	2.5	MKS0D024700B00_
0.068 "	2.5	7	4.6	2.5	MKS0C026800B00_	2.5	7	4.6	2.5	MKS0D026800B00_
0.1 μF	3	7.5	4.6	2.5	MKS0C031000C00_	3	7.5	4.6	2.5	MKS0D031000C00_
0.15 "	3	7.5	4.6	2.5	MKS0C031500C00_	3.8	8.5	4.6	2.5	MKS0D031500D00_
0.22 "	3	7.5	4.6	2.5	MKS0C032200C00_	4.6	9	4.6	2.5	MKS0D032200E00_
0.33 "	3.8	8.5	4.6	2.5	MKS0C033300D00_	5.5	10	4.6	2.5	MKS0D033300F00_
0.47 "	4.6	9	4.6	2.5	MKS0C034700E00_					
0.68 "	5.5	10	4.6	2.5	MKS0C036800F00_					
1.0 μF	5.5	10	4.6	2.5	MKS0C041000F00_					

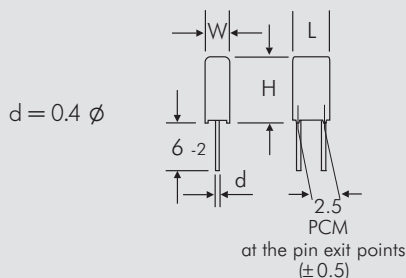
Capacitance	250 VDC/160 VAC*					400 VDC/200 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
3300 pF	2.5	7	4.6	2.5	MKS0F013300B00_	2.5	7	4.6	2.5	MKS0G013300B00_
4700 "	2.5	7	4.6	2.5	MKS0F014700B00_	2.5	7	4.6	2.5	MKS0G014700B00_
6800 "	2.5	7	4.6	2.5	MKS0F016800B00_	2.5	7	4.6	2.5	MKS0G016800B00_
0.01 μF	2.5	7	4.6	2.5	MKS0F021000B00_	3	7.5	4.6	2.5	MKS0G021000C00_
0.015 "	2.5	7	4.6	2.5	MKS0F021500B00_	3.8	8.5	4.6	2.5	MKS0G021500D00_
0.022 "	2.5	7	4.6	2.5	MKS0F022200B00_	4.6	9	4.6	2.5	MKS0G022200E00_
0.033 "	3	7.5	4.6	2.5	MKS0F023300C00_	5.5	10	4.6	2.5	MKS0G023300F00_
0.047 "	3.8	8.5	4.6	2.5	MKS0F024700D00_	5.5	10	4.6	2.5	MKS0G024700F00_
0.068 "	4.6	9	4.6	2.5	MKS0F026800E00_					
0.1 μF	5.5	10	4.6	2.5	MKS0F031000F00_					

* AC voltage: $f = 50 \text{ Hz}$; $1.4 \times U_{\text{rms}} + \text{UDC} \leq U_r$

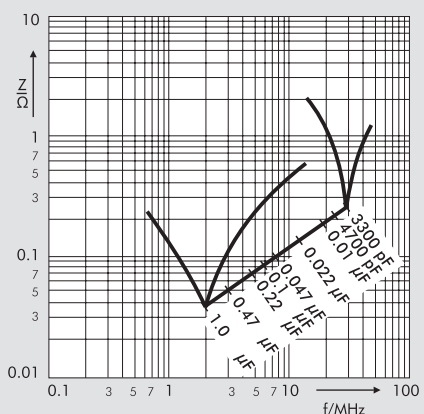
New range and value

** PCM = Printed circuit module = pin spacing

Dims. in mm.



Part number completion:	
Tolerance:	20 % = M 10 % = K 5 % = J
Packing:	bulk = S
Pin length:	6-2 = SD
Taped version see page 148.	



Rights reserved to amend design data without prior notification.

Recommendation for Processing and Application of Through-Hole Capacitors

Soldering Process

Internal temperature of the capacitor must be kept as follows:

Polyester: preheating: $T_{\max.} \leq 125^{\circ}\text{C}$
soldering: $T_{\max.} \leq 135^{\circ}\text{C}$

Polypropylene: preheating: $T_{\max.} \leq 100^{\circ}\text{C}$
soldering: $T_{\max.} \leq 110^{\circ}\text{C}$

Single wave soldering

Soldering bath temperature: $T < 260^{\circ}\text{C}$

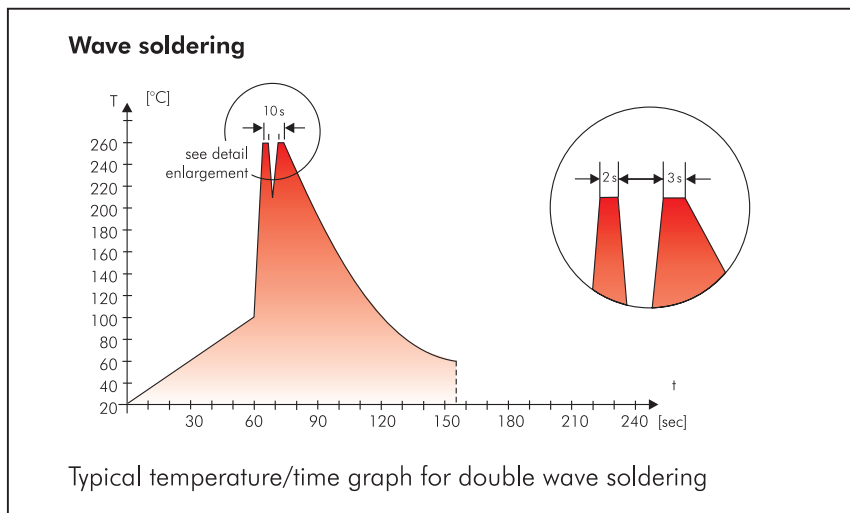
Dwell time: $t < 5\text{ sec}$

Double wave soldering

Soldering bath temperature: $T < 260^{\circ}\text{C}$

Dwell time: $\Sigma t < 5\text{ sec}$

Due to different soldering processes and heat requirements the graphs are to be regarded as a recommendation only.



WIMA Quality and Environmental Philosophy

ISO 9001:2008 Certification

ISO 9001:2008 is an international basic standard of quality assurance systems for all branches of industry. The approval according to ISO 9001:2008 of our factories by the infaz (Institut für Auditierung und Zertifizierung) certifies that organisation, equipment and monitoring of quality assurance in our factories correspond to internationally recognized standards.

WIMA WPCS

The WIMA Process Control System (WPCS) is a quality surveillance and optimization system developed by WIMA. WPCS is a major part of the quality-oriented WIMA production. Points of application during production process:

- incoming material inspection
- metallization
- film inspection
- schoopage
- pre-healing
- pin attachment
- cast resin preparation/encapsulation
- 100% final inspection
- Testing as per customer requirements

WIMA Environmental Policy

All WIMA capacitors, irrespective of whether through-hole devices or SMD, are made of environmentally friendly materials. Neither during manufacture nor in the product itself any toxic substances are used, e.g.

- | | |
|------------------------|------------|
| – Lead | – PBB/PBDE |
| – PCB | – Arsenic |
| – CFC | – Cadmium |
| – Hydrocarbon chloride | – Mercury |
| – Chromium 6+ | – etc. |

We merely use pure, recyclable materials for packing our components, such as:

- carton
- cardboard
- adhesive tape made of paper
- polystyrene

We almost completely refrain from using packing materials such as:

- foamed polystyrene (Styropor®)
- adhesive tapes made of plastic
- metal clips

RoHS Compliance

According to the RoHS Directive 2011/65/EU certain hazardous substances like e.g. lead, cadmium, mercury must not be used any longer in electronic equipment as of July 1st, 2006. For the sake of the environment WIMA has refrained from using such substances since years already.



WIMA Kondensatoren sind bleifrei
konform RoHS 2011/65/EU

WIMA capacitors are lead free
in accordance with RoHS 2011/65/EU

Tape for lead-free WIMA capacitors

DIN EN ISO 14001:2004

WIMA's environmental management has been established in accordance with the guidelines of DIN EN ISO 14001:2004 to optimize the production processes with regard to energy and resources.

Typical Dimensions for Taping Configuration

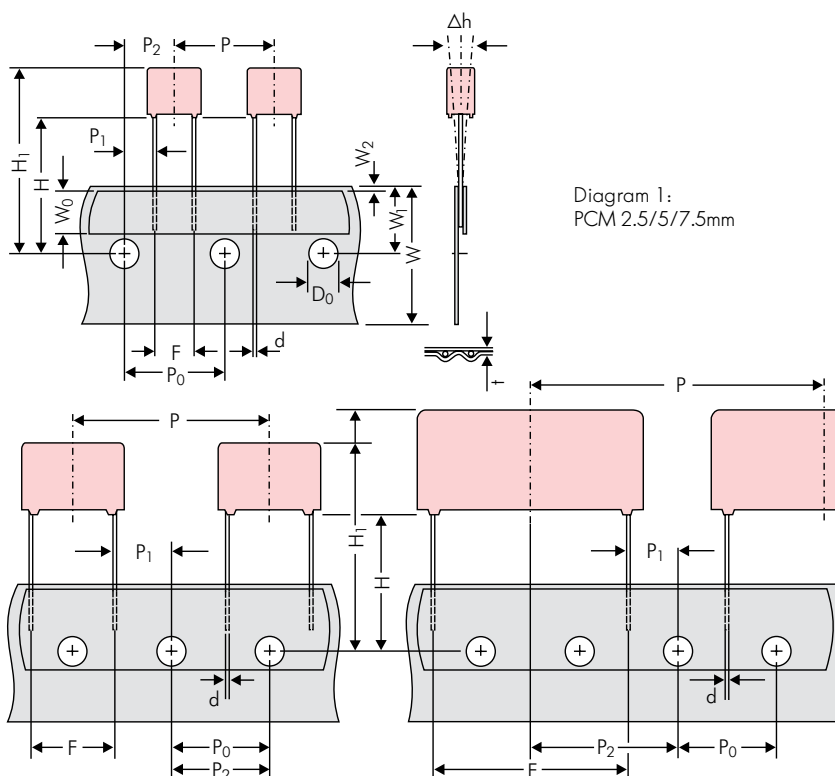


Diagram 2: PCM 10/15 mm

Diagram 3: PCM 22.5 and 27.5*mm

*PCM 27.5 taping possible with two feed holes between components

Dimensions for Radial Taping								
Designation	Symbol	PCM 2.5 taping	PCM 5 taping	PCM 7.5 taping	PCM 10 taping*	PCM 15 taping*	PCM 22.5 taping	PCM 27.5 taping
Carrier tape width	W	18.0 ±0.5	18.0 ±0.5	18.0 ±0.5	18.0 ±0.5	18.0 ±0.5	18.0 ±0.5	18.0 ±0.5
Hold-down tape width	W ₀	6.0 for hot-sealing adhesive tape	6.0 for hot-sealing adhesive tape	12.0 for hot-sealing adhesive tape	12.0 for hot-sealing adhesive tape	12.0 for hot-sealing adhesive tape	12.0 for hot-sealing adhesive tape	12.0 for hot-sealing adhesive tape
Hole position	W ₁	9.0 ±0.5	9.0 ±0.5	9.0 ±0.5	9.0 ±0.5	9.0 ±0.5	9.0 ±0.5	9.0 ±0.5
Hold-down tape position	W ₂	0.5 to 3.0 max.	0.5 to 3.0 max.	0.5 to 3.0 max.	0.5 to 3.0 max.	0.5 to 3.0 max.	0.5 to 3.0 max.	0.5 to 3.0 max.
Feed hole diameter	D ₀	4.0 ±0.2	4.0 ±0.2	4.0 ±0.2	4.0 ±0.2	4.0 ±0.2	4.0 ±0.2	4.0 ±0.2
Pitch of component	P	12.7 ±1.0	12.7 ±1.0	12.7 ±1.0	25.4 ±1.0	25.4 ±1.0	38.1 ±1.5	38.1 ±1.5 or 50.8 ±1.5
Feed hole pitch	P ₀	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max. 1.0 mm/20 pitch
Feed hole centre to pin	P ₁	5.1 ±0.5	3.85 ±0.7	2.6 ±0.7	7.7 ±0.7	5.2 ±0.7	7.8 ±0.7	5.3 ±0.7
Hole centre to component centre	P ₂	6.35 ±1.3	6.35 ±1.3	6.35 ±1.3	12.7 ±1.3	12.7 ±1.3	19.05 ±1.3	19.05 ±1.3
Feed hole centre to bottom edge of the component	H	16.5 ±0.3	16.5 ±0.3	16.5 ±0.5	16.5 ±0.5	16.5 ±0.5	16.5 ±0.5	16.5 ±0.5
		18.5 ±0.5	18.5 ±0.5	18.5 ±0.5	18.5 ±0.5	18.5 ±0.5	18.5 ±0.5	18.5 ±0.5
Feed hole centre to top edge of the component	H ₁	H+H _{component} < H ₁ 32.25 max.	H+H _{component} < H ₁ 32.25 max.	H+H _{component} < H ₁ 24.5 to 31.5	H+H _{component} < H ₁ 25.0 to 31.5	H+H _{component} < H ₁ 26.0 to 37.0	H+H _{component} < H ₁ 30.0 to 43.0	H+H _{component} < H ₁ 35.0 to 45.0
Pin spacing at upper edge of carrier tape	F	2.5 ±0.5	5.0 ^{+0.8} _{-0.2}	7.5 ±0.8	10.0 ±0.8	15 ±0.8	22.5 ±0.8	27.5 ±0.8
Pin diameter	d	0.4 ±0.05	0.5 ±0.05	*0.5 ±0.05 or 0.6 ^{+0.06} _{-0.05}	*0.5 ±0.05 or 0.6 ^{+0.06} _{-0.05}	0.8 ^{+0.08} _{-0.05}	0.8 ^{+0.08} _{-0.05}	0.8 ^{+0.08} _{-0.05}
Component alignment	Δh	± 2.0 max.	± 2.0 max.	± 3.0 max.	± 3.0 max.	± 3.0 max.	± 3.0 max.	± 3.0 max.
Total tape thickness	t	0.6 ±0.2	0.6 ±0.2	0.6 ±0.2	0.6 ±0.2	0.6 ±0.2	0.6 ±0.2	0.6 ±0.2
Package (see also page 149)		ROLL/AMMO			AMMO			
		REEL ϕ 360 max. ϕ 30 ±1	B 52 ±2 B 58 ±2 } depending on comp. dimensions	REEL ϕ 360 max. ϕ 30 ±1 B 52 ±2 or 58 ±2 or REEL ϕ 500 max. ϕ 25 ±1 B 54 ±2 or 60 ±2 or 68 ±2 } depending on PCM and component dimensions				
Unit		see details page 150.						

Dims in mm.

* Diameter of pins see General Data.

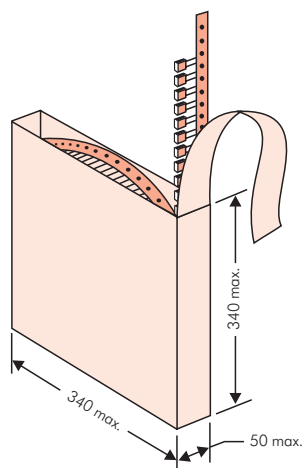
* PCM 10 and PCM 15 can be crimped to PCM 7.5.

Position of components according to PCM 7.5 (sketch 11). P₀ = 12.7 or 15.0 is possible

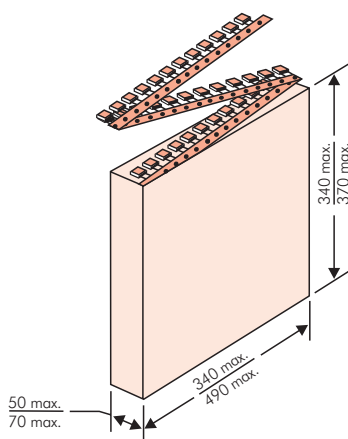
Please clarify customer-specific deviations with the manufacturer.

Types of Tape Packaging of Capacitors for Automatic Radial Insertion

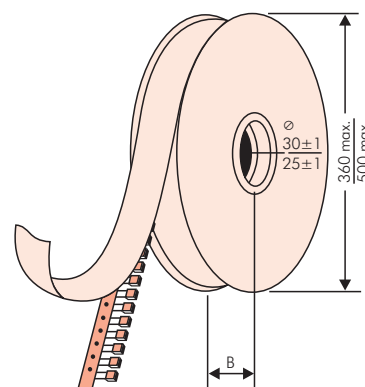
■ ROLL Packaging



■ AMMO Packaging



■ REEL Packaging



BAR CODE (Labelling)

Labelling of package units in plain text and with alphanumerical Bar Code

Scanner decoding of

- WIMA supplier number
- Customer's P/O number
- Customer's part number
- WIMA confirmation number
- WIMA part number
- Lot number
- Date code
- Quantity

In addition part description of

- article
- capacitance value
- rated voltage
- dimensions
- capacitance tolerance
- packing

as well as gross weight and customer's name are indicated in plain text.

WIMA Best Capacitors Made in Germany		Werk Unna	
Supplier-ID: 123456789	RoHS 2011/65/EU	Date Code: 08.10.10	
Purchase Order No. (P/O): Bestellung xyz		Quantity: 5.000	
Customer Part No.: KUNDETEILENUMMER		Customer No.: 0000100002	
		Gross Weight [g]: 1870	
WIMA Confirmation No.: 0001004063000100		WIMA Part No.: MKS2C034701C00K89D	
Handling Unit:	MKS 2	QTY: 5.000	COO: DE
1000067326	MKS 2 0.47 μ F 63 VDC 3.5x8.5x7.2 RMS	Standard 10% Loss - Standard	Drühte 6-2
	Vorlage Debitur Inland	Week 03/2011	

BARCODE „Code 39“



Packing Quantities for Capacitors with Radial Pins in PCM 2.5 mm to 22.5 mm

PCM	Size				bulk	pcs. per packing unit									
						ROLL		REEL		AMMO					
	W	H	L	Codes		S	H16.5	H18.5	ø 360	ø 500	340 × 340	490 × 370			
						N	O	F	I	H	J	A	C	B	D
2.5 mm	2.5	7	4.6	0B	5000										
	3	7.5	4.6	0C	5000										
	3.8	8.5	4.6	0D	5000										
	4.6	9	4.6	0E	5000										
	5.5	10	4.6	0F	5000										
5 mm	2.5	6.5	7.2	1A	5000										
	3	7.5	7.2	1B	5000										
	3.5	8.5	7.2	1C	5000										
	4.5	6	7.2	1D	6000										
	4.5	9.5	7.2	1E	4000										
	5	10	7.2	1F	3500										
	5.5	7	7.2	1G	4000										
	5.5	11.5	7.2	1H	2500										
	6.5	8	7.2	1I	2500										
	7.2	8.5	7.2	1J	2500										
	7.2	13	7.2	1K	2000										
	8.5	10	7.2	1L	2000										
	8.5	14	7.2	1M	1500										
11	16	7.2	1N	1000											
7.5 mm	2.5	7	10	2A	5000										
	3	8.5	10	2B	5000										
	4	9	10	2C	4000										
	4.5	9.5	10.3	2D	3500										
	5	10.5	10.3	2E	3000										
	5.7	12.5	10.3	2F	2000										
	7.2	12.5	10.3	2G	1500										
10 mm	3	9	13	3A	3000										
	4	8.5	13.5	FA	3000										
	4	9	13	3C	3000										
	4	9.5	13	3D	3000										
	5	10	13.5	FB	2000										
	5	11	13	3F	3000										
	6	12	13	3G	2400										
	6	12.5	13	3H	2400										
8	12	13	3I	2000											
15 mm	5	11	18	4B	2400										
	5	13	19	FC	1000										
	6	12.5	18	4C	2000										
	6	14	19	FD	1000										
	7	14	18	4D	1600										
	7	15	19	FE	1000										
	8	15	18	4F	1200										
	8	17	19	FF	500										
	9	14	18	4H	1200										
	9	16	18	4J	900										
	10	18	19	FG	500										
11	14	18	4M	1000											
22.5 mm	5	14	26.5	5A	1200										
	6	15	26.5	5B	1000										
	7	16.5	26.5	5D	760										
	8	20	28	FH	500										
	8.5	18.5	26.5	5F	500										
	10	22	28	FI	570*										
	10.5	19	26.5	5G	594*										
	10.5	20.5	26.5	5H	594*										
	11	21	26.5	5I	561*										
	12	24	28	FJ	480*										

* TPS (Tray-Packing-System). Plate versions may have different packing units.
Samples and pre-production needs on request.

■ Moulded versions.

Rights reserved to amend design data without prior notification.

Packing Quantities for Capacitors with Radial Pins in PCM 27.5 mm to 52.5 mm

PCM	Size				bulk	ROLL		pcs. per packing unit				AMMO			
								REEL							
	W	H	L	Codes		H16.5	H18.5	ø 360	ø 500	H16.5	H18.5	H16.5	H18.5	H16.5	H18.5
					S	N	O	F	I	H	J	A	C	B	D
27.5 mm	9	19	31.5	6A	567*	–	–	–	–	460/340*	–	–	–	420	–
	11	21	31.5	6B	459*	–	–	–	–	380/280*	–	–	–	350	–
	13	24	31.5	6D	378*	–	–	–	–	300	–	–	–	290	–
	13	25	33	FK	405*	–	–	–	–	–	–	–	–	–	–
	15	26	31.5	6F	324*	–	–	–	–	270	–	–	–	250	–
	15	26	33	FL	324*	–	–	–	–	–	–	–	–	–	–
	17	29	31.5	6G	198*	–	–	–	–	–	–	–	–	–	–
	17	34.5	31.5	6I	198*	–	–	–	–	–	–	–	–	–	–
	20	32	33	FM	162*	–	–	–	–	–	–	–	–	–	–
	20	39.5	31.5	6J	162*	–	–	–	–	–	–	–	–	–	–
37.5 mm	9	19	41.5	7A	441*	–	–	–	–	–	–	–	–	–	–
	11	22	41.5	7B	357*	–	–	–	–	–	–	–	–	–	–
	13	24	41.5	7C	294*	–	–	–	–	–	–	–	–	–	–
	15	26	41.5	7D	252*	–	–	–	–	–	–	–	–	–	–
	17	29	41.5	7E	154*	–	–	–	–	–	–	–	–	–	–
	19	32	41.5	7F	140*	–	–	–	–	–	–	–	–	–	–
	20	39.5	41.5	7G	126*	–	–	–	–	–	–	–	–	–	–
	24	45.5	41.5	7H	112*	–	–	–	–	–	–	–	–	–	–
	31	46	41.5	7I	84*	–	–	–	–	–	–	–	–	–	–
	35	50	41.5	7J	35*	–	–	–	–	–	–	–	–	–	–
	40	55	41.5	7K	28*	–	–	–	–	–	–	–	–	–	–
48.5 mm	19	31	56	8D	120*	–	–	–	–	–	–	–	–	–	–
	23	34	56	8E	80*	–	–	–	–	–	–	–	–	–	–
	27	37.5	56	8H	84*	–	–	–	–	–	–	–	–	–	–
	33	48	56	8J	25*	–	–	–	–	–	–	–	–	–	–
	37	54	56	8L	25*	–	–	–	–	–	–	–	–	–	–
52.5 mm	25	45	57	9D	70*	–	–	–	–	–	–	–	–	–	–
	30	45	57	9E	60*	–	–	–	–	–	–	–	–	–	–
	35	50	57	9F	25*	–	–	–	–	–	–	–	–	–	–
	45	55	57	9H	20*	–	–	–	–	–	–	–	–	–	–
	45	65	57	9J	20*	–	–	–	–	–	–	–	–	–	–

* for 2-inch transport pitches.

* TPS (Tray-Packing-System). Plate versions may have different packing units.
Samples and pre-production needs on request.

■ Moulded versions. Rights reserved to amend design data without prior notification.

Updated data on www.wima.com



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 μF				2.5x6.5x7.2		-		20%	bulk	6 -2	
Type description:				Rated voltage:		Capacitance:				Size:				Tolerance:			
SMD-PET = SMDT				50 VDC = B0		22 pF = 0022				4.8x3.3x3 Size 1812 = KA				±20% = M			
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				520 VDC = H2		470 pF = 0470				10.2x7.6x5 Size 4030 = VA							
FKS 3 = FKS3				600 VDC = I0		680 pF = 0680				12.7x10.2x6 Size 5040 = XA							
FKP 3 = FKP 3				630 VDC = J0		1000 pF = 1100				15.3x13.7x7 Size 6054 = YA							
MKS 2 = MKS2				700 VDC = K0		1500 pF = 1150				2.5x7x4.6 PCM 2.5 = 0B						Packing:	
MKP 2 = MKP2				800 VDC = L0		2200 pF = 1220				3x7.5x4.6 PCM 2.5 = 0C						AMMO H16.5 340x340 = A	
MKS 4 = MKS4				850 VDC = M0		3300 pF = 1330				2.5x6.5x7.2 PCM 5 = 1A						AMMO H16.5 490x370 = B	
MKP 4C = MKPC				900 VDC = N0		4700 pF = 1470				3x7.5x7.2 PCM 5 = 1B						AMMO H18.5 340x340 = C	
MKP 4 = MKP4				1000 VDC = O1		6800 pF = 1680				2.5x7x10 PCM 7.5 = 2A						AMMO H18.5 490x370 = D	
MKP 10 = MKP1				1100 VDC = P0		0.01 μF = 2100				3x8.5x10 PCM 7.5 = 2B						REEL H16.5 360 = F	
FKP 1 = FKP1				1200 VDC = Q0		0.022 μF = 2220				3x9x13 PCM 10 = 3A						REEL H16.5 500 = H	
MKP-X2 = MKX2				1250 VDC = R0		0.047 μF = 2470				4x9x13 PCM 10 = 3C						REEL H18.5 360 = I	
MKP-X1 R = MKX1				1500 VDC = S0		0.1 μF = 3100				5x11x18 PCM 15 = 4B						REEL H18.5 500 = J	
MKP-Y2 = MKY2				1600 VDC = T0		0.22 μF = 3220				6x12.5x18 PCM 15 = 4C						ROLL H16.5 = N	
MP 3-X2 = MPX2				2000 VDC = U0		0.47 μF = 3470				6x12.5x18 PCM 15 = 4C						ROLL H18.5 = O	
MP 3-X1 = MPX1				2500 VDC = V0		1 μF = 4100				5x14x26.5 PCM 22.5 = 5A						BLISTER W12 180 = P	
MP 3-Y2 = MPY2				3000 VDC = W0		2.2 μF = 4220				6x15x26.5 PCM 22.5 = 5B						BLISTER W12 330 = Q	
MP 3R-Y2 = MPRY				4000 VDC = X0		4.7 μF = 4470				9x19x31.5 PCM 27.5 = 6A						BLISTER W16 330 = R	
MKP 4F = MKPF				6000 VDC = Y0		10 μF = 5100				11x21x31.5 PCM 27.5 = 6B						BLISTER W24 330 = T	
Snubber MKP = SNMP				250 VAC = 0W		22 μF = 5220				9x19x41.5 PCM 37.5 = 7A						Bulk/TPS Standard = S	
Snubber FKP = SNFP				275 VAC = 1W		47 μF = 5470				11x22x41.5 PCM 37.5 = 7B						...	
GTO MKP = GTOM				300 VAC = 2W		100 μF = 6100				19x31x56 PCM 48.5 = 8D							
DC-LINK MKP 3 = DCP3				305 VAC = AW		220 μF = 6220				25x45x57 PCM 52.5 = 9D							
DC-LINK MKP 4 = DCP4				350 VAC = BW		1000 μF = 7100				...							
DC-LINK MKP 4S = DCPS				440 VAC = 4W		1500 μF = 7150											
DC-LINK MKP 5 = DCP5				500 VAC = 5W		...											
DC-LINK MKP 6 = DCP6				...													
DC-LINK HC = DCHC																	
DC-LINK HY = DCHY																	