

Polypropylene (PP) Capacitors for High Pulse Applications with Metal Foil Electrodes and Metallized Internal Series Connection in PCM 15 mm to 37.5 mm. Capacitances from 100 pF to 4.7 F. Rated Voltages from 400 VDC to 2000 VDC.

Special Features

- 0 High pulse duty
- 0 Self-healing
- 0 Internal series connection
- 0 Very low dissipation factor
- 0 Negative capacitance change versus temperature
- 0 Smaller box sizes than FKP 1
- 0 AEC-Q200 qualified 
- 0 According to RoHS 2015/863/EU

Typical Applications

For high pulse and high frequency applications e.g.

- 0 Switch mode power supplies
- 0 Converter in drives and power electronics
- 0 Deflection systems in monitors and TV-sets
- 0 Electronic ballasts

Construction

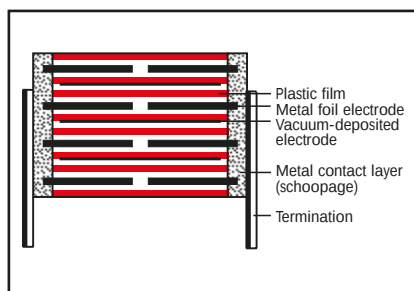
Dielectric:

Polypropylene (PP) film

Capacitor electrodes:

Aluminium foil and single-sided metallized plastic film

Internal construction:



Encapsulation:

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

Terminations:

Tinned wire.

Marking:

Colour: Red. Marking: Black.

Electrical Data

Capacitance range:

100 pF to 4.7 F (E12-values on request)

Rated voltages:

400 VDC, 630 VDC, 1000 VDC, 1250 VDC, 1600 VDC, 2000 VDC

Capacitance tolerances:

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

Operating temperature range:

-55° C to +105° C

Climatic test category:

55/100/56 in accordance with IEC

Insulation resistance at +20° C:

C 5 0.1 F: 6.1×10^5 MΩ

C 2 0.1 F: $6.10.000$ sec (MΩ F)

Measuring voltage: 100 V/1 min.

Dissipation factors at +20° C: tan

at f	C50.1 F	0.1 F 1C51.0F	C21.0 F
1 kHz	5.5×10^{-4}	5.5×10^{-4}	5.5×10^{-4}
10 kHz	5.6×10^{-4}	5.6×10^{-4}	-
100 kHz	5.10×10^{-4}	-	-

Maximum pulse rise time:

Capacitance pF/F	max. pulse rise time V/sec at T _A < 40° C					
	400 VDC	630 VDC	1000 VDC	1250 VDC	1600 VDC	2000 VDC
100 ... 220	-	-	-	-	-	39000
330 ... 680	-	-	-	-	-	39000
1000 ... 2200	-	-	-	-	27000	39000
3300 ... 6800	-	-	-	-	17000	21000
0.01 ... 0.022	7000	11000	11000	11000	11000	11000
0.033 ... 0.068	7000	9000	9000	9000	9000	9000
0.1 ... 0.22	6000	9000	9000	9000	9000	9000
0.33 ... 0.68	3000	5000	5000	5000	5000	5000
1.0 ... 4.7	1000	1600	2000	2000	2000	-

Mechanical Tests

Pull test on pins:

d 5 0.8 Ø: 10 N in direction of pins

d > 0.8 Ø: 20 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 up to and including case size 15 x 26 x 31.5 / PCM 27.5 mm.

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	400 VDC/250 VAC*					630 VDC/400 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
0.01 F	5	11	18	15	FKP4G021004B00-----	5	11	18	15	FKP4J021004B00-----
0.015 "	5	11	18	15	FKP4G021504B00-----	6	12.5	18	15	FKP4J021504C00-----
0.022 "	6	12.5	18	15	FKP4G022204C00-----	7	14	18	15	FKP4J022204D00-----
0.033 "	7	14	18	15	FKP4G023304D00-----	8	15	18	15	FKP4J023304F00-----
0.047 "	8	15	18	15	FKP4G024704F00-----	6	15	26.5	22.5	FKP4J023305B00-----
	6	15	26.5	22.5	FKP4G024705B00-----	9	16	18	15	FKP4J024704J00-----
0.068 "	7	16.5	26.5	22.5	FKP4G026805D00-----	7	16.5	26.5	22.5	FKP4J024705D00-----
						8.5	18.5	26.5	22.5	FKP4J026805F00-----
0.1 F	8.5	18.5	26.5	22.5	FKP4G031005F00-----	10.5	19	26.5	22.5	FKP4J031005G00-----
0.15 "	11	21	26.5	22.5	FKP4G031505I00-----	11	21	31.5	27.5	FKP4J031006B00-----
	9	19	31.5	27.5	FKP4G031506A00-----	11	21	26.5	22.5	FKP4J031505I00-----
0.22 "	11	21	31.5	27.5	FKP4G032206B00-----	11	21	31.5	27.5	FKP4J031506B00-----
	13	24	31.5	27.5	FKP4G033306D00-----	13	24	31.5	27.5	FKP4J032206D00-----
0.33 "	13	24	31.5	27.5	FKP4G033306D00-----	15	26	31.5	27.5	FKP4J033306F00-----
0.47 "	17	29	31.5	27.5	FKP4G034706G00-----	17	34.5	31.5	27.5	FKP4J034706I00-----
0.68 "	17	34.5	31.5	27.5	FKP4G036806I00-----	17	34.5	31.5	27.5	FKP4J036806I00-----
						19	32	41.5	37.5	FKP4J036807F00-----
1.0 F	20	39.5	31.5	27.5	FKP4G041006J00-----	20	39.5	41.5	37.5	FKP4J041007G00-----
1.5 "	20	39.5	41.5	37.5	FKP4G041507G00-----	24	45.5	41.5	37.5	FKP4J041507H00-----
2.2 "	24	45.5	41.5	37.5	FKP4G042207H00-----	31	46	41.5	37.5	FKP4J042207I00-----
3.3 "	31	46	41.5	37.5	FKP4G043307I00-----	40	55	41.5	37.5	FKP4J043307K00-----
4.7 "	40	55	41.5	37.5	FKP4G044707K00-----					

Capacitance	1000 VDC/600 VAC*					1250 VDC/600 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
0.01 F	6	12.5	18	15	FKP4O121004C00-----	9	16	18	15	FKP4R021004J00-----
0.015 "	5	14	26.5	22.5	FKP4O121005A00-----	6	15	26.5	22.5	FKP4R021005B00-----
	7	14	18	15	FKP4O121504D00-----	7	16.5	26.5	22.5	FKP4R021505D00-----
0.022 "	6	15	26.5	22.5	FKP4O121505B00-----	8.5	18.5	26.5	22.5	FKP4R022205F00-----
	8	15	18	15	FKP4O122204F00-----					
0.033 "	6	15	26.5	22.5	FKP4O122205B00-----	10.5	19	26.5	22.5	FKP4R023305G00-----
	7	16.5	26.5	22.5	FKP4O123305D00-----					
0.047 "	8.5	18.5	26.5	22.5	FKP4O124705F00-----	9	19	31.5	27.5	FKP4R023306A00-----
	9	19	31.5	27.5	FKP4O124706A00-----	11	21	31.5	27.5	FKP4R024706B00-----
0.068 "	11	21	26.5	22.5	FKP4O126805I00-----	13	24	31.5	27.5	FKP4R026806D00-----
	9	19	31.5	27.5	FKP4O126806A00-----					
0.1 F	11	21	31.5	27.5	FKP4O131006B00-----	15	26	31.5	27.5	FKP4R031006F00-----
0.15 "	13	24	31.5	27.5	FKP4O131506D00-----	15	26	31.5	27.5	FKP4R031506F00-----
0.22 "	15	26	31.5	27.5	FKP4O132206F00-----	20	39.5	31.5	27.5	FKP4R032206J00-----
						17	29	41.5	37.5	FKP4R032207E00-----
0.33 "	17	34.5	31.5	27.5	FKP4O133306I00-----	19	32	41.5	37.5	FKP4R033307F00-----
	19	32	41.5	37.5	FKP4O133307F00-----					
0.47 "	20	39.5	41.5	37.5	FKP4O134707G00-----	20	39.5	41.5	37.5	FKP4R034707G00-----
0.68 "	24	45.5	41.5	37.5	FKP4O136807H00-----	24	45.5	41.5	37.5	FKP4R036807H00-----
1.0 F	31	46	41.5	37.5	FKP4O141007I00-----	31	46	41.5	37.5	FKP4R041007I00-----
1.5 "	35	50	41.5	37.5	FKP4O141507J00-----	35	50	41.5	37.5	FKP4R041507J00-----
2.2 "	35	50	41.5	37.5	FKP4O142207J00-----					

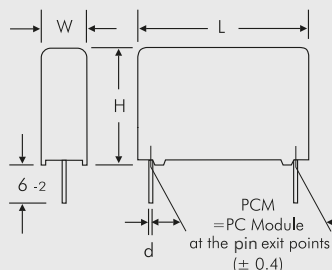
* AC voltage: f 1000 Hz; $1.4 \times U_{rms} + UDC$ 5 U_r

** PCM = Printed circuit module
= pin spacing

Dims. in mm.

Ionisation inception level in isolated cases
may be lower than admissible rated AC voltage.

Ø d	PCM
0.8	15 - 27.5
1.0	37.5



Part number completion:

Tolerance: 20 % = M
10 % = K
5 % = J

Packing: bulk = S
Pin length: 6-2 = SD

Taped version see page 157.

Rights reserved to amend design data without prior notification.

Continuation

General Data

Capacitance	1600 VDC/650 VAC*					2000 VDC/700 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
100 pF						5	11	18	15	FKP4U001004B00-----
150 "						5	11	18	15	FKP4U001504B00-----
220 "						5	11	18	15	FKP4U002204B00-----
330 "						5	11	18	15	FKP4U003304B00-----
470 "						5	11	18	15	FKP4U004704B00-----
680 "						5	11	18	15	FKP4U006804B00-----
1000 pF	5	11	18	15	FKP4T011004B00-----	5	11	18	15	FKP4U011004B00-----
1500 "	5	11	18	15	FKP4T011504B00-----	6	12.5	18	15	FKP4U011504C00-----
2200 "	6	12.5	18	15	FKP4T012204C00-----	7	14	18	15	FKP4U012204D00-----
3300 "	7	14	18	15	FKP4T013304D00-----	9	16	18	15	FKP4U013304J00-----
4700 "	8	15	18	15	FKP4T014704F00-----	6	15	26.5	22.5	FKP4U013305B00-----
6800 "	9	16	18	15	FKP4T016804J00-----	7	16.5	26.5	22.5	FKP4U014705D00-----
0.01 F	6	15	26.5	22.5	FKP4T021005B00-----	8.5	18.5	26.5	22.5	FKP4U016805F00-----
0.015 "	8.5	18.5	26.5	22.5	FKP4T021505F00-----	10.5	19	26.5	22.5	FKP4U021005G00-----
0.022 "	10.5	19	26.5	22.5	FKP4T022205H00-----	11	21	26.5	22.5	FKP4U021505I00-----
0.033 "	9	19	31.5	27.5	FKP4T022206A00-----	9	19	31.5	27.5	FKP4U021506A00-----
0.047 "	11	21	31.5	27.5	FKP4T023306B00-----	11	21	31.5	27.5	FKP4U022206B00-----
0.068 "	13	24	31.5	27.5	FKP4T024706D00-----	11	22	41.5	37.5	FKP4U022207B00-----
						13	24	31.5	27.5	FKP4U023306D00-----
						15	26	31.5	27.5	FKP4U024706F00-----
						15	26	41.5	37.5	FKP4U024707D00-----
						17	34.5	31.5	27.5	FKP4U026806I00-----
						17	29	41.5	37.5	FKP4U026807E00-----
0.1 F	17	34.5	31.5	27.5	FKP4T031006I00-----	17	29	41.5	37.5	FKP4U031007E00-----
0.15 "	20	39.5	31.5	27.5	FKP4T031506J00-----	20	39.5	41.5	37.5	FKP4U031507G00-----
	19	32	41.5	37.5	FKP4T031507F00-----					
0.22 "	20	39.5	41.5	37.5	FKP4T032207G00-----	24	45.5	41.5	37.5	FKP4U032207H00-----
0.33 "	24	45.5	41.5	37.5	FKP4T033307H00-----	31	46	41.5	37.5	FKP4U033307I00-----
0.47 "	31	46	41.5	37.5	FKP4T034707I00-----	31	46	41.5	37.5	FKP4U034707I00-----
0.68 "	35	50	41.5	37.5	FKP4T036807J00-----	35	50	41.5	37.5	FKP4U036807J00-----
1.0 F	40	55	41.5	37.5	FKP4T041007K00-----					

* AC voltage: f 1000 Hz; $1.4 \times U_{rms} + U_{DC} 5 U_r$

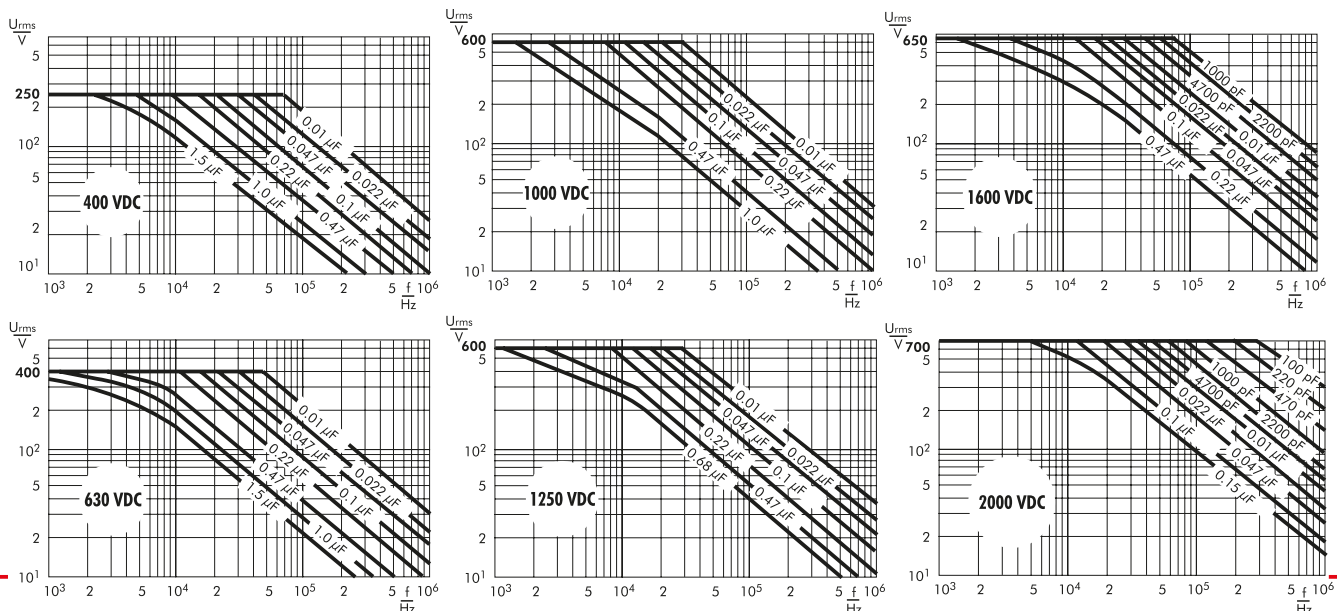
** PCM = Printed circuit module = pin spacing

Ionisation inception level in isolated cases may be lower than admissible rated AC voltage.

Dims. in mm.

Rights reserved to amend design data without prior notification.

Permissible AC voltage in relation to frequency at 10° C internal temperature rise (general guide).



Recommendation for Processing and Application of Through-Hole Capacitors

Internal temperature of the capacitor must be kept as follows:

Polyester: preheating: $T_{\max.}$ 5125° C
soldering: $T_{\max.}$ 5135° C

Polypropylene: preheating: $T_{\max.}$ 5100° C
soldering: $T_{\max.}$ 5110° C

Single wave soldering

Soldering bath temperature: T 1 260 ° C

Dwell time: t 1 5 sec

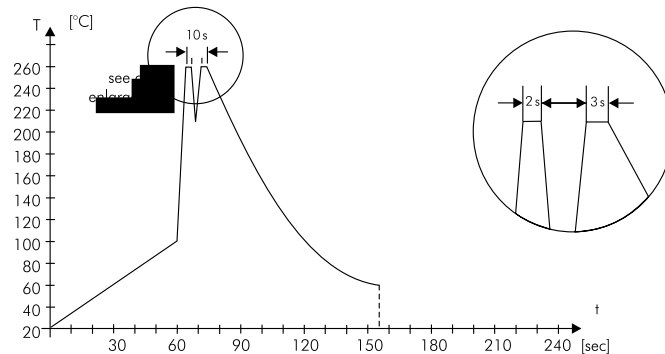
Double wave soldering

Soldering bath temperature: T 1 260 ° C

Ø 00WPH t 1 5 sec

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

Wave soldering



Typical temperature/time graph for double wave soldering

WIMA Quality and Environmental Philosophy

ISO 9001:2015 is an international basic standard of quality assurance systems for all branches of industry. The approval according to ISO 9001:2015 of our factories certifies that organisation, equipment and monitoring of quality assurance in our factories correspond to internationally recognized standards.

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

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

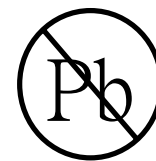
We merely use pure, recyclable materials for packing our components, such as:

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

We almost completely refrain from using packing materials such as:

- adhesive tapes made of plastic
- metal clips

According to the RoHS Directive 2015/863/EU as amended from time to time 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 re-frained from using such substances since years already.



WIMA Kondensatoren sind bleifrei
konform RoHS 2015/863/EU

WIMA capacitors are lead free
in accordance with RoHS 2015/863/EU

Tape for lead-free WIMA capacitors

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

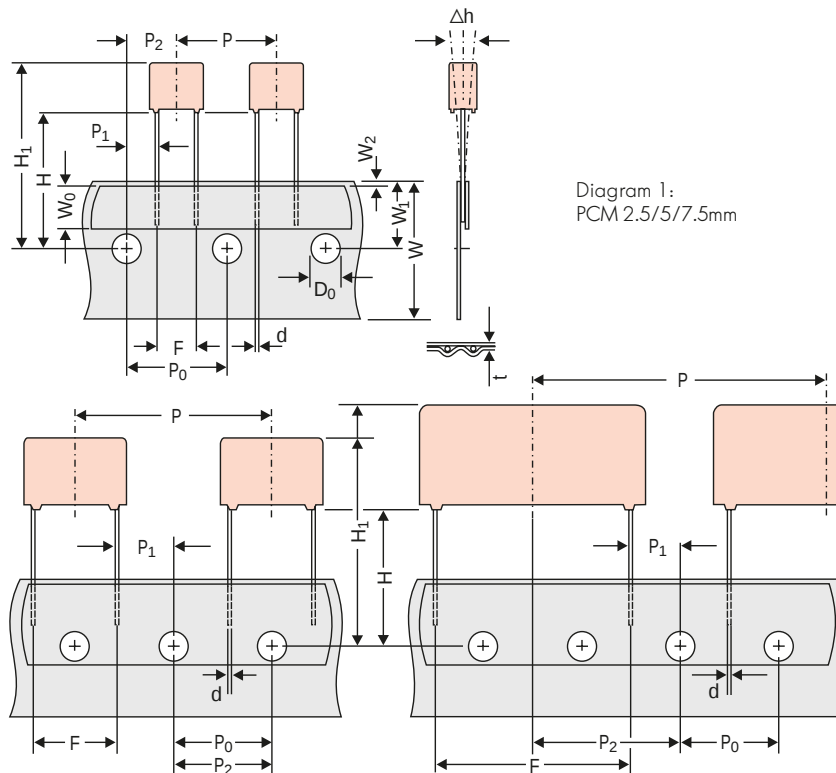


Diagram 1:
PCM 2.5/5/7.5mm

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 error max. 1.0 mm/20 pitch	12.7 ±0.3 error max. 1.0 mm/20 pitch	12.7 ±0.3 error max. 1.0 mm/20 pitch	12.7 ±0.3 error max. 1.0 mm/20 pitch	12.7 ±0.3 error max. 1.0 mm/20 pitch	12.7 ±0.3 error max. 1.0 mm/20 pitch	12.7 ±0.3 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 18.5 ±0.5	16.5 ±0.3 18.5 ±0.5	16.5 ±0.5 18.5 ±0.5	16.5 ±0.5 18.5 ±0.5	16.5 ±0.5 18.5 ±0.5	16.5 ±0.5 18.5 ±0.5	16.5 ±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}
PSRQHWDOLJQPHQW	K	± 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 158)	▲	ROLL/AMMO			AMMO			
		REEL Ø 360 max. Ø 30 ±1	B 52 ±2 58 ±2 } depending on comp. dimensions		REEL Ø 360 max. Ø 30 ±1	B 52 ±2 58 ±2 66 ±2 } or REEL Ø 500 max. Ø 25 ±1	B 54 ±2 60 ±2 68 ±2 } depending on PCM and component dimensions	
Unit		see details page 159.						

▲ When ordering please specify dimension H and required packaging type.

Dims in mm.

§ Diameter of pins see General Data.

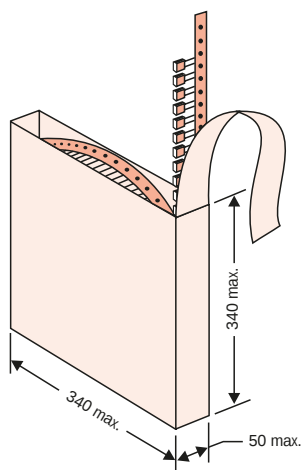
Please clarify customer-specific deviations with the manufacturer.

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

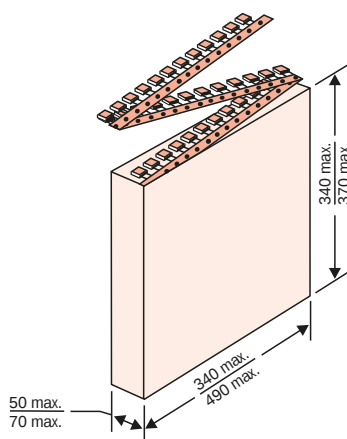
Position of components according to PCM 7.5 (sketch 1). P₀ = 12.7 or 15.0 is possible

Types of Tape Packaging of Capacitors for Automatic Radial Insertion

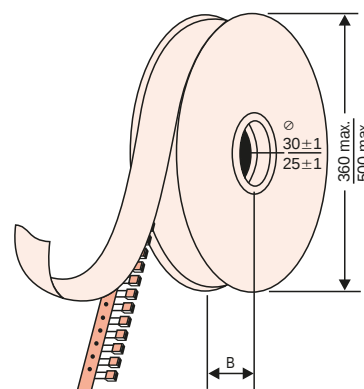
○ ROLL Packaging



○ AMMO Packaging



○ REEL Packaging



BAR CODE (Labelling)

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

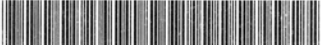
- ! WIMA supplier number
- ! Date code
- ! Customer's P/O number
- ! P/O line
- ! Customer's part number
- ! WIMA part number
- ! Quantity
- ! WIMA confirmation number
- ! Country of origin
- ! Customer name
- ! Handling unit number
- ! Week of delivery.

In addition part description of

- article
- capacitance value
- rated voltage
- dimensions
- technical note
- capacitance tolerance
- packing
- connecting information

BARCODE PDF417

BARCODE 2D Datamatrix

WIMA Best Capacitors Made in Germany Werk Aurich	
Supplier-ID: LIEF.NR.	Date Code: 20210419
	
Purchase Order No. (P/O): Bestellung xyz	P/O line: 100
	
Customer Part No.: KUNDENTEILENUMMER	
	
WIMA Part No.: MKP1F041006B00KSSD	Quantity: 459
	
WIMA Confirmation No.: 0001105072000100	
	
Customer No.: 0000100002	RoHS 2011/65/EU
Gross Weight [g]: 4557	COO: DE
	
WIMA – MKP 10 WIMA Part No.: MKP1F041006B00KSSD MKP 10 1.0 µF 250 VDC 11x21x31.5 RM27.5 Standard 10% Loss – Standard Drähte 6–2 Vorlage Debitor Inland	
	0001105072000100
1002021443	QTY: 459 Week 19/2021

Packing Quantities for Capacitors with Radial Pins in PCM 2.5 mm to 27.5 mm



PCM	Size				bulk	pcs. per packing unit									
						ROLL		REEL				AMMO			
	H16.5	H18.5	Ø 360			Ø 500		340 x 340		490 x 370					
W	H	L	Codes	S	N	O	F	I	H	J	A	C	B	D	
2.5 mm	2.5	7	4.6	0B	5000	2200	2500	—	2800	—					
	3	7.5	4.6	0C	5000	2000	2300	—	2300	—					
	3.8	8.5	4.6	0D	5000	1500	1800	—	1800	—					
	4.6	9	4.6	0E	5000	1200	1500	—	1500	—					
	5.5	10	4.6	0F	5000	900	1200	—	1200	—					
5 mm	2.5	6.5	7.2	1A	5000	2200	2500	—	2800	—					
	3	7.5	7.2	1B	5000	2000	2300	—	2300	—					
	3.5	8.5	7.2	1C	5000	1600	2000	—	2000	—					
	4.5	6	7.2	1D	6000	1300	1500	—	1500	—					
	4.5	9.5	7.2	1E	4000	1300	1500	—	1500	—					
	5	10	7.2	1F	3500	1100	1400	—	1400	—					
	5.5	7	7.2	1G	4000	1000	1200	—	1200	—					
	5.5	11.5	7.2	1H	2500	1000	1200	—	1200	—					
	6.5	8	7.2	1I	2500	800	1000	—	1000	—					
	7.2	8.5	7.2	1J	2500	700	1000	—	1000	—					
	7.2	13	7.2	1K	2000	700	950	—	1000	—					
	8.5	10	7.2	1L	2000	600	800	—	800	—					
	8.5	14	7.2	1M	1500	600	800	—	800	—					
	11	16	7.2	1N	1000	500	600	—	640	—					
7.5 mm	2.5	7	10	2A	5000	—	2500	4400	2500	—					
	3	8.5	10	2B	5000	—	2200	4300	2300	4150					
	4	9	10	2C	4000	—	1700	3200	1700	3000					
	4.5	9.5	10.3	2D	3500	—	1500	2900	1400	2700					
	5	10.5	10.3	2E	3000	—	1300	2500	1300	—					
	5.7	12.5	10.3	2F	2000	—	1000	2200	1100	—					
	7.2	12.5	10.3	2G	1500	—	900	1800	1000	—					
10 mm	3	9	13	3A	3000	—	1100	2200	—	1900					
	4	9	13	3C	3000	—	900	1600	—	1450					
	4	9.5	13	3D	3000	—	900	1600	—	1400					
	5	11	13	3F	3000	—	700	1300	—	1100					
	6	12	13	3G	2400	—	550	1100	—	1000					
	6	12.5	13	3H	2400	—	550	1100	—	1000					
	8	12	13	3I	2000	—	400	800	—	740					
15 mm	5	11	18	4B	2400	—	600	1200	—	1150					
	6	12.5	18	4C	2000	—	500	1000	—	1000					
	7	14	18	4D	1600	—	450	900	—	850					
	8	15	18	4F	1200	—	400	800	—	740					
	9	14	18	4H	1200	—	350	700	—	650					
	9	16	18	4J	900	—	350	700	—	650					
	11	14	18	4M	1000	—	300	600	—	540					
22.5 mm	5	14	26.5	5A	1200	—	—	800	—	770					
	6	15	26.5	5B	1000	—	—	700	—	640					
	7	16.5	26.5	5D	760	—	—	600	—	550					
	8.5	18.5	26.5	5F	500	—	—	480	—	450					
	10.5	19	26.5	5G	594*	—	—	400	—	360					
	10.5	20.5	26.5	5H	594*	—	—	400	—	360					
	11	21	26.5	5I	561*	—	—	380	—	350					
27.5 mm	9	19	31.5	6A	567*	—	—	460/340*	—	—					
	11	21	31.5	6B	459*	—	—	380/280*	—	—					
	13	24	31.5	6D	378*	—	—	300	—	—					
	15	26	31.5	6F	324*	—	—	270	—	—					
	17	29	31.5	6G	198*	—	—	—	—	—					
	17	34.5	31.5	6I	198*	—	—	—	—	—					
	20	39.5	31.5	6J	162*	—	—	—	—	—					

* for 2-inch transport pitches.

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

Rights reserved to amend design data without prior notification.

Packing Quantities for Capacitors with Radial Pins in PCM 37.5 mm to 52.5 mm

PCM	Size				bulk	ROLL		pcs. per packing unit				AMMO			
						REEL		Ø 360		Ø 500		340 x 340		490 x 370	
	H16.5	H18.5	H16.5	H18.5		H16.5	H18.5	H16.5	H18.5	H16.5	H18.5				
	W	H	L	Codes	S	N	O	F	I	H	J	A	C	B	D
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*	—	—	—	—	—	—	—	—	—	—
	28	38	41.5	7L	84*	—	—	—	—	—	—	—	—	—	—
	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*	—	—	—	—	—	—	—	—	—	—

* TPS (Tray-Packing-System). Plate versions may have different packing units.

**For Snubber capacitors in 2-pin version the PCM is changing to 38.5 respective 49.5 mm.

Samples and pre-production needs on request.

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Updated data on www.wima.com



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 F				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 Size1812 = KA		±20% = M							
SMD-PEN = SMDN				63 VDC = C0		47 pF = 0047				4.8x3.3x4 Size1812 = KB		±10% = K							
SMD-PPS = SMDI				100 VDC = D0		100 pF = 0100				5.7x5.1x3.5 Size2220 = QA		±5% = J							
FKP 02 = FKP0				250 VDC = F0		150 pF = 0150				5.7x5.1x4.5 Size2220 = QB		±2.5% = H							
MKS 02 = MKS0				400 VDC = G0		220 pF = 0220				7.2x6.1x3 Size2824 = TA		±1% = E							
FKS 2 = FKS2				450 VDC = H0		330 pF = 0330				7.2x6.1x5 Size2824 = TB		...							
FKP 2 = FKP2				520 VDC = H2		470 pF = 0470				10.2x7.6x5 Size4030 = VA									
FKS 3 = FKS3				600 VDC = I0		680 pF = 0680				12.7x10.2x6 Size5040 = XA									
FKP 3 = FKP 3				630 VDC = J0		1000 pF = 1100				15.3x13.7x7 Size6054 = YA									
MKS 2 = MKS2				700 VDC = K0		1500 pF = 1150				2.5x7x4.6 PCM2.5 = 0B									
MKP 2 = MKP2				800 VDC = L0		2200 pF = 1220				3x7.5x4.6 PCM2.5 = 0C									
MKS 4 = MKS4				850 VDC = M0		3300 pF = 1330				2.5x6.5x7.2 PCM5 = 1A									
MKP 4 = MKP4				900 VDC = N0		4700 pF = 1470				3x7.5x7.2 PCM5 = 1B									
MKP 10 = MKP1				1000 VDC = O1		6800 pF = 1680				2.5x7x10 PCM7.5 = 2A									
FKP 4 = FKP4				1100 VDC = P0		0.01 F = 2100				3x8.5x10 PCM7.5 = 2B									
FKP 1 = FKP1				1200 VDC = Q0		0.022 F = 2220				3x9x13 PCM10 = 3A									
MKP-X2 = MKX2				1250 VDC = R0		0.047 F = 2470				4x9x13 PCM10 = 3C									
MKP-X1 R = MKX1				1500 VDC = S0		0.1 F = 3100				5x11x18 PCM15 = 4B									
MKP-Y2 = MKY2				1600 VDC = T0		0.22 F = 3220				6x12.5x18 PCM15 = 4C									
MKP 4F = MKPF				1700 VDC = TA		0.47 F = 3470				5x14x26.5 PCM22.5 = 5A									
Snubber MKP = SNMP				2000 VDC = U0		1 F = 4100				6x15x26.5 PCM22.5 = 5B									
Snubber FKP = SNFP				2500 VDC = V0		2.2 F = 4220				9x19x31.5 PCM27.5 = 6A									
GTO MKP = GTOM				3000 VDC = W0		4.7 F = 4470				11x21x31.5 PCM27.5 = 6B									
DC-LINK MKP 4 = DCP4				4000 VDC = X0		10 F = 5100				9x19x41.5 PCM37.5 = 7A									
DC-LINK MKP 6 = DCP6				6000 VDC = Y0		22 F = 5220				11x22x41.5 PCM37.5 = 7B									
DC-LINK HC = DCHC				230 VAC = 3Y		47 F = 5470				19x31x56 PCM 48.5 = 8D									
				275 VAC = 1W		100 F = 6100				25x45x57 PCM 52.5 = 9D									
				300 VAC = 2W		220 F = 6220				...									
				305 VAC = AW		1000 F = 7100													
				350 VAC = BW		1500 F = 7150													
				440 VAC = 4W		...													
				...															