

Metallized Polypropylene (PP) Capacitors in PCM 5 mm. Capacitances from 1000 pF to 1.0 μF. Rated Voltages from 63 VDC to 1000 VDC.

Special Features

- High volume/capacitance ratio
- Self-healing
- Increased pulse duty from 250 VDC rated voltage
- Very low dissipation factor
- Negative capacitance change versus temperature
- Very low dielectric absorption
- AEC-Q200 qualified
- According to RoHS 2011/65/EU

Typical Applications

- For high frequency applications e.g.
- Sample and hold
 - Timing
 - Oscillating circuits
 - High frequency coupling and decoupling

Construction

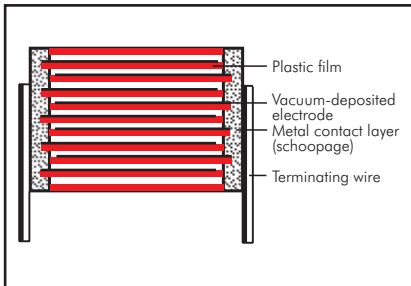
Dielectric:

Polypropylene (PP) 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: Black.

Electrical Data

Capacitance range:

1000 pF to 1.0 μF (E12-values on request)

Rated voltages:

63 VDC, 100 VDC, 250 VDC, 400 VDC, 630 VDC, 800 VDC, 1000 VDC

Capacitance tolerances:

± 20%, ±10%, ±5%

Operating temperature range:

-55° C to +100° C

Test specifications:

In accordance with IEC 60384-16

Climatic test category:

55/100/56 in accordance with IEC

Insulation resistance at +20° C:

≥ 1 x 10⁵ MΩ

Measuring voltage:

U_r = 63 V: U_{test} = 50 V/1 min.

U_r ≥ 100 V: U_{test} = 100 V/1 min.

Test voltage:

1.6 U_r, 2 sec.

Maximum pulse rise time:

Capacitance pF/μF	max. pulse rise time V/μsec						
	63 VDC	100 VDC	250 VDC	400 VDC	630 VDC	800 VDC	1000 VDC
1000 ... 2200	-	-	-	300	400	450	500
3300 ... 6800	-	-	-	300	400	450	500
0.01 ... 0.022	100	100	250	300	400	450	500
0.033 ... 0.068	100	100	250	300	400	450	-
0.1 ... 0.22	100	100	250	250	-	-	-
0.33 ... 0.68	100	100	250	-	-	-	-
1.0	70	70	-	-	-	-	-

for pulses equal to the rated voltage

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:

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

Bump test:

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

Dielectric absorption:

0.05 %

Dissipation factors at +20° C: tan δ

at f	C ≤ 0.1 μF	0.1 μF < C ≤ 1.0 μF
1 kHz	≤ 5 x 10 ⁻⁴	≤ 5 x 10 ⁻⁴
10 kHz	≤ 8 x 10 ⁻⁴	≤ 8 x 10 ⁻⁴
100 kHz	≤ 25 x 10 ⁻⁴	-

Voltage derating:

A voltage derating factor of 1.35 % 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 x U_r and 40° C)

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

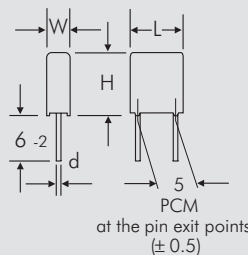
Capacitance	63 VDC/40 VAC*					100 VDC/63 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
0.01 μ F	3	7.5	7.2	5	MKP2C021001B00_____	3	7.5	7.2	5	MKP2D021001B00_____
0.015 "	3	7.5	7.2	5	MKP2C021501B00_____	3	7.5	7.2	5	MKP2D021501B00_____
0.022 "	3	7.5	7.2	5	MKP2C022201B00_____	3	7.5	7.2	5	MKP2D022201B00_____
0.033 "	3	7.5	7.2	5	MKP2C023301B00_____	3	7.5	7.2	5	MKP2D023301B00_____
0.047 "	3.5	8.5	7.2	5	MKP2C024701C00_____	3.5	8.5	7.2	5	MKP2D024701C00_____
0.068 "	4.5	9.5	7.2	5	MKP2C026801E00_____	4.5	9.5	7.2	5	MKP2D026801E00_____
0.1 μ F	5	10	7.2	5	MKP2C031001F00_____	5	10	7.2	5	MKP2D031001F00_____
0.15 "	5.5	11.5	7.2	5	MKP2C031501H00_____	5.5	11.5	7.2	5	MKP2D031501H00_____
0.22 "	7.2	13	7.2	5	MKP2C032201K00_____	7.2	13	7.2	5	MKP2D032201K00_____
0.33 "	8.5	14	7.2	5	MKP2C033301M00_____	8.5	14	7.2	5	MKP2D033301M00_____
0.47 "	8.5	14	7.2	5	MKP2C034701M00_____	8.5	14	7.2	5	MKP2D034701M00_____
0.68 "	8.5	14	7.2	5	MKP2C036801M00_____	8.5	14	7.2	5	MKP2D036801M00_____
1.0 μ F	11	16	7.2	5	MKP2C041001N00_____	11	16	7.2	5	MKP2D041001N00_____

Capacitance	250 VDC/160 VAC*					400 VDC/200 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
1000 pF						3	7.5	7.2	5	MKP2G011001B00_____
1500 "						3	7.5	7.2	5	MKP2G011501B00_____
2200 "						3	7.5	7.2	5	MKP2G012201B00_____
3300 "						3	7.5	7.2	5	MKP2G013301B00_____
4700 "						3	7.5	7.2	5	MKP2G014701B00_____
6800 "						3	7.5	7.2	5	MKP2G016801B00_____
0.01 μ F	3	7.5	7.2	5	MKP2F021001B00_____	3.5	8.5	7.2	5	MKP2G021001C00_____
0.015 "	3	7.5	7.2	5	MKP2F021501B00_____	3.5	8.5	7.2	5	MKP2G021501C00_____
0.022 "	3	7.5	7.2	5	MKP2F022201B00_____	4.5	9.5	7.2	5	MKP2G022201E00_____
0.033 "	3	7.5	7.2	5	MKP2F023301B00_____	5.5	11.5	7.2	5	MKP2G023301H00_____
0.047 "	3.5	8.5	7.2	5	MKP2F024701C00_____	7.2	13	7.2	5	MKP2G024701K00_____
0.068 "	4.5	9.5	7.2	5	MKP2F026801E00_____	7.2	13	7.2	5	MKP2G026801K00_____
0.1 μ F	5	10	7.2	5	MKP2F031001F00_____	8.5	14	7.2	5	MKP2G031001M00_____
0.15 "	7.2	13	7.2	5	MKP2F031501K00_____	11	16	7.2	5	MKP2G031501N00_____
0.22 "	7.2	13	7.2	5	MKP2F032201K00_____					
0.33 "	8.5	14	7.2	5	MKP2F033301M00_____					
0.47 "	11	16	7.2	5	MKP2F034701N00_____					

Capacitance	630 VDC/250 VAC*				
	W	H	L	PCM**	Part number
1000 pF	3	7.5	7.2	5	MKP2J011001B00_____
1500 "	3	7.5	7.2	5	MKP2J011501B00_____
2200 "	3	7.5	7.2	5	MKP2J012201B00_____
3300 "	3	7.5	7.2	5	MKP2J013301B00_____
4700 "	3	7.5	7.2	5	MKP2J014701B00_____
6800 "	3.5	8.5	7.2	5	MKP2J016801C00_____
0.01 μ F	4.5	9.5	7.2	5	MKP2J021001E00_____
0.015 "	5	10	7.2	5	MKP2J021501F00_____
0.022 "	5.5	11.5	7.2	5	MKP2J022201H00_____
0.033 "	7.2	13	7.2	5	MKP2J023301K00_____
0.047 "	8.5	14	7.2	5	MKP2J024701M00_____
0.068 "	11	16	7.2	5	MKP2J026801N00_____

** PCM = Printed circuit module = pin spacing.

Dims. in mm.



$d = 0.5 \phi$

Part number completion:	
Tolerance:	20 % = M
	10 % = K
	5 % = J
Packing:	bulk = S
Pin length:	6-2 = SD
Taped version see page 149.	

* AC voltage: $f \leq 400 \text{ Hz}$; $1.4 \times U_{\text{rms}} + \text{UDC} \leq U_r$

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Continuation

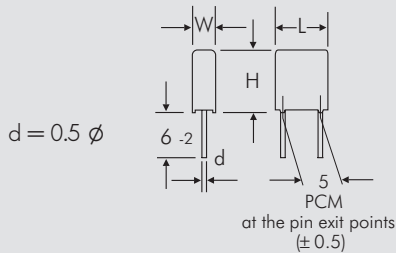
General Data

Capacitance	800 VDC/250 VAC*					1000 VDC/250 VAC*				
	W	H	L	PCM**	Part number	W	H	L	PCM**	Part number
1000 pF	3	7.5	7.2	5	MKP2L011001B00_	3	7.5	7.2	5	MKP2O111001B00_
1500 "	3	7.5	7.2	5	MKP2L011501B00_	3	7.5	7.2	5	MKP2O111501B00_
2200 "	3	7.5	7.2	5	MKP2L012201B00_	3	7.5	7.2	5	MKP2O112201B00_
3300 "	3	7.5	7.2	5	MKP2L013301B00_	3.5	8.5	7.2	5	MKP2O113301C00_
4700 "	3.5	8.5	7.2	5	MKP2L014701C00_	4.5	9.5	7.2	5	MKP2O114701E00_
6800 "	4.5	9.5	7.2	5	MKP2L016801E00_	5	10	7.2	5	MKP2O116801F00_
0.01 μF	5	10	7.2	5	MKP2L021001F00_	7.2	13	7.2	5	MKP2O121001K00_
0.015 "	5.5	11.5	7.2	5	MKP2L021501H00_	8.5	14	7.2	5	MKP2O121501M00_
0.022 "	7.2	13	7.2	5	MKP2L022201K00_	11	16	7.2	5	MKP2O122201N00_
0.033 "	8.5	14	7.2	5	MKP2L023301M00_					
0.047 "	11	16	7.2	5	MKP2L024701N00_					

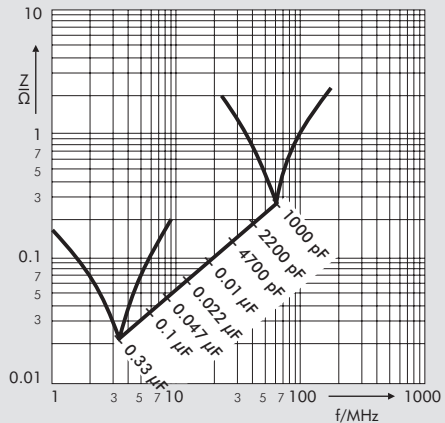
* AC voltage: $f \leq 400 \text{ Hz}$; $1.4 \times U_{\text{rms}} + U_{\text{DC}} \leq U_r$

** PCM = printed circuit module = pin spacing.

Dims. in mm.



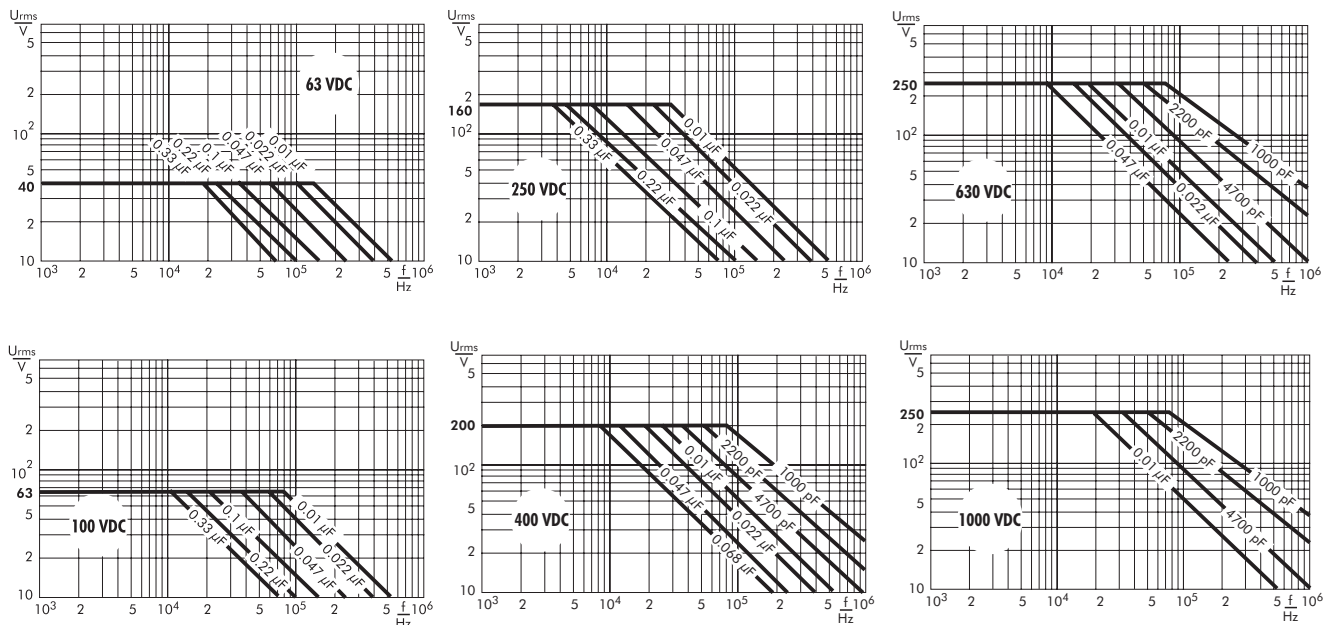
Part number completion:
 Tolerance: 20 % = M
 10 % = K
 5 % = J
 Packing: bulk = S
 Pin length: 6-2 = SD
 Taped version see page 149.



Impedance change with frequency (general guide).

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

Soldering Process

Internal temperature of the capacitor must be kept as follows:

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

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

Single wave soldering

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

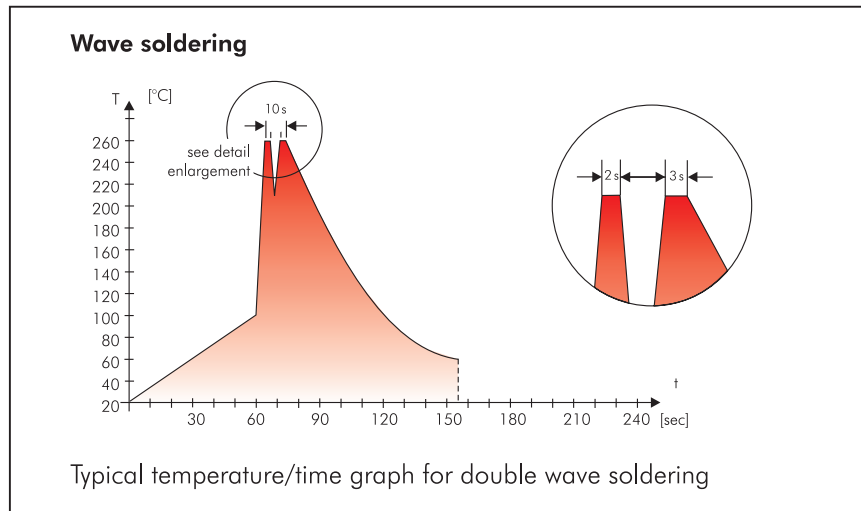
Dwell time: $t < 5 \text{ sec}$

Double wave soldering

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

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 9001:2015 Certification

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 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
- 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

RoHS Compliance

According to the RoHS Directive 2011/65/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 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

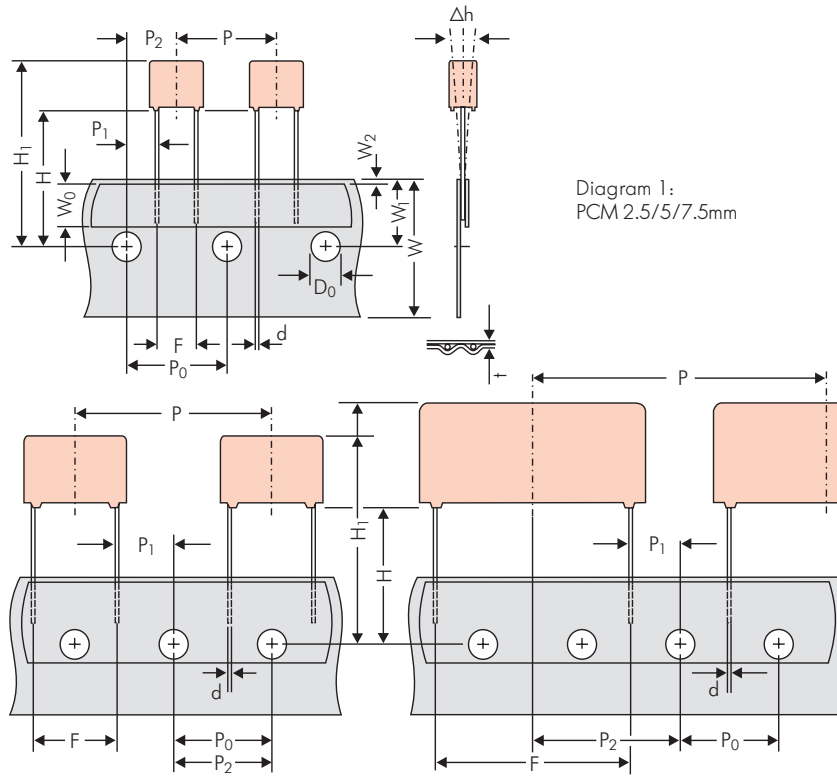


Diagram 1:
PCM 2.5/5/7.5mm

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

Designation	Symbol	Dimensions for Radial Taping						
		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 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}
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 150)	ROLL/AMMO			AMMO				
	REEL	φ 360 max. φ 30 ±1	B 52 ±2 58 ±2 } depending on comp. dimensions	REEL	φ 360 max. φ 30 ±1	52 ±2 58 ±2 or 66 ±2	REEL	φ 500 max. φ 25 ±1
Unit	see details page 151.							

Dims in mm.

* Diameter of pins see General Data.

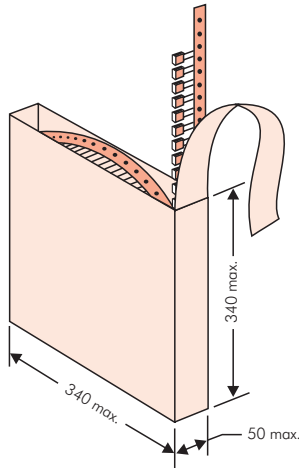
* PCM 10 and PCM 15 can be crimped to PCM 7.5.

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

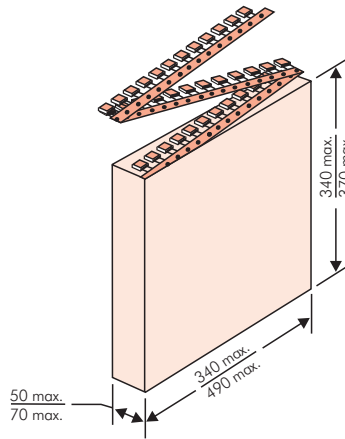
Please clarify customer-specific deviations with the manufacturer.

Types of Tape Packaging of Capacitors for Automatic Radial Insertion

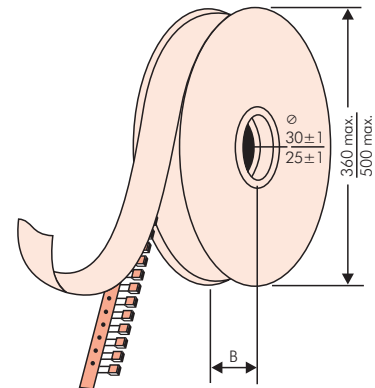
■ ROLL Packaging



■ 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.: 0001004053000100	WIMA Part No.: MKS2C034701C00K8SD	
Handling Unit: MKS 2	QTY: 5.000	COO: DE
	MKS 2 0.47 µF 63 VDC 3.5x8.5x7.2 RM5	
1000067326	Standard 10% Loss - Standard Dichte 6-2	Week 03/2011
	Vorlage Debitor Inland	

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 x 340	490 x 370		
					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	3100	
	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	8.5	13.5	FA	3000			900	1600				1450	
	4	9	13	3C	3000			900	1600				1450	
	4	9.5	13	3D	3000			900	1600				1400	
	5	10	13.5	FB	2000			700	1300				1200	
	5	11	13	3F	3000			700	1300				1200	
	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	
	5	13	19	FC	1000			600	1200				1200	
	6	12.5	18	4C	2000			500	1000				1000	
	6	14	19	FD	1000			500	1000				1000	
	7	14	18	4D	1600			450	900				850	
	7	15	19	FE	1000			450	900				850	
	8	15	18	4F	1200			400	800				740	
	8	17	19	FF	500			400	800				740	
	9	14	18	4H	1200			350	700				650	
	9	16	18	4J	900			350	700				650	
10	18	19	FG	500			300	650				590		
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	20	28	FH	500				500				480	
	8.5	18.5	26.5	5F	500				480				450	
	10	22	28	FI	570*				420				380	
	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	
	12	24	28	FJ	480*				350				310	

* TPS (Tray-Packing-System). Plate versions may have different packing units. Moulded versions. Rights reserved to amend design data without prior notification. Samples and pre-production needs on request.



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

PCM	Size				bulk	pcs. per packing unit											
						ROLL		REEL				AMMO					
	W	H	L	Codes		S	N	O	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
								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



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				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 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 4C = MKPC				900 VDC = N0		4700 pF = 1470			3x7.5x7.2 PCM5 = 1B								
MKP 4 = MKP4				1000 VDC = O1		6800 pF = 1680			2.5x7x10 PCM7.5 = 2A								
MKP 10 = MKP1				1100 VDC = P0		0.01 μ F = 2100			3x8.5x10 PCM7.5 = 2B								
FKP 1 = FKP1				1200 VDC = Q0		0.022 μ F = 2220			3x9x13 PCM10 = 3A								
MKP-X2 = MKX2				1250 VDC = R0		0.047 μ F = 2470			4x9x13 PCM10 = 3C								
MKP-X1 R = MKX1				1500 VDC = S0		0.1 μ F = 3100			5x11x18 PCM15 = 4B								
MKP-Y2 = MKY2				1600 VDC = T0		0.22 μ F = 3220			6x12.5x18 PCM15 = 4C								
MP 3-X2 = MPX2				2000 VDC = U0		0.47 μ F = 3470			5x14x26.5 PCM22.5 = 5A								
MP 3-X1 = MPX1				2500 VDC = V0		1 μ F = 4100			6x15x26.5 PCM22.5 = 5B								
MP 3-Y2 = MPY2				3000 VDC = W0		2.2 μ F = 4220			9x19x31.5 PCM27.5 = 6A								
MP 3R-Y2 = MPRY				4000 VDC = X0		4.7 μ F = 4470			11x21x31.5 PCM27.5 = 6B								
MKP 4F = MKPF				6000 VDC = Y0		10 μ F = 5100			9x19x41.5 PCM37.5 = 7A								
Snubber MKP = SNMP				250 VAC = 0W		22 μ F = 5220			11x22x41.5 PCM37.5 = 7B								
Snubber FKP = SNFP				275 VAC = 1W		47 μ F = 5470			19x31x56 PCM48.5 = 8D								
GTO MKP = GTOM				300 VAC = 2W		100 μ F = 6100			25x45x57 PCM52.5 = 9D								
DC-LINK MKP 3 = DCP3				305 VAC = AW		220 μ F = 6220			...								
DC-LINK MKP 4 = DCP4				350 VAC = BW		1000 μ F = 7100											
DC-LINK MKP 4S = DCP4S				440 VAC = 4W		1500 μ F = 7150											
DC-LINK MKP 5 = DCP5				500 VAC = 5W		...											
DC-LINK MKP 6 = DCP6				...													
DC-LINK HC = DCHC									Version code:		Pin length (untaped)						
DC-LINK HY = DCHY									Standard = 00		3.5 ±0.5 = C9						
									Version A1 = 1A		6 -2 = SD						
									Version A1.1.1 = 1B		16 ±1 = P1						
									Version A2 = 2A		...						
									...		Pin length (taped)						
											none = 00						

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.