WIMA MP 3R-Y2



Metallized Paper (MP) RFI-Capacitors Class Y2 with Internal Series Connection PCM 15 mm to 27.5 mm

Special Features

- Particularly high reliability against active and passive flammability
- Twice the safety by internal series connection
- High degree of interference suppression due to good attenuation and low ESR
- For temperatures up to +110°C
- According to RoHS 2011/65/EC

Typical Applications

Class Y2 RFI applications to meet EMC regulations

- Capacitors connected to the mains between phase or neutral and earthed casing
- By-passing of the basic or supplementary insulation, pulse peak voltage ≤ 5 kV

Construction

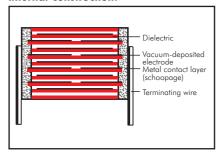
Dielectric:

Paper, epoxy resin impregnated

Capacitor electrodes:

Vacuum-deposited

Internal construction:



Encapsulation:

Self-extinguishing epoxy resin, UL 94 V-0. metal foil

Terminations:

Tinned wire.

Marking:

Marking: Black on Silver.

Electrical Data

Capacitance range:

1000 pF to 0.1 μ F (E12-values on request)

Rated voltage:

250 VAC, 300 VAC

Continuous DC voltage* (general guide): ≤ 1250 V

Capacitance tolerances:

±20%

Operating temperature range:

-40° C to +110° C

Climatic test category:

40/110/56/C according to IEC for 250 VAC 40/110/56/B according to IEC for 300 VAC

Insulation resistance at +20° C:

 $\geq 12 \times 10^3 M\Omega$

Measuring voltage: 100 V/1 min.

Dissipation factors:

 $\tan \delta \le 13 \times 10^{-3}$ at 1 kHz and +20° C

Test specifications:

In accordance with IEC 60384-14

Approvals:

, ibb. o . a.s.							
C	Authority	Specification	Sym	bol	Approval-No.		
Country	Aumoniy	Specification	250 VAC	300 VAC	250 VAC	300 VAC	
Germany	VDE	IEC 60384-14/3	EN 132 400	10	91851	40032534	
USA	UL	UL 1414 (250 VAC)	9	4	E 13	4915	

Maximum pulse rise time:

Capacitance pF/ µ F	Pulse rise time V/µsec max. operation
1000 2200	2000
3300 0.015	1500
0.022 0.1	500

for pulses equal to a voltage amplitude with $\sqrt{2}$ x 250 VAC = 355 V with $\sqrt{2}$ x 300 VAC = 425 V

according to IEC 60384-14 **Test voltage:** 3000 VDC, 2 sec.

Reliability:

Operational life $> 300\,000$ hours Failure rate < 1 fit (0.5 x U_r and 40° C)

Mounting Recommendation

To minimize or avoid shock and/or vibration stresses to terminating wires and solder connections we recommend to fix voluminous resin-potted MP capacitors as from e.g. PCM 22.5 mm in an appropriate way since for constructional reasons they do not sit tight on the board.

* If safety-approved EMI suppression capacitors are operated with a DC voltage being above the specified AC voltage rating the given approvals are no longer valid (IEC 60384-14).

Furthermore the permissible pulse rise time du/dt (F_{max} .) will be subject to a reduction according to

 $F_{max} = F_r \times \sqrt{2} \times UAC / UDC$

if the DC operating voltage UDC is higher than $\sqrt{2}\,\mathrm{x}$ UAC

Packing

Available taped and reeled up to and including PCM 22.5 mm.

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

For further details and graphs please refer to Technical Information.

WIMA MP 3R-Y2



Continuation

General Data

Committee				250 VA	C*	300 VAC*					
Capacitance	W	Н	L	PCM**	Part number	W	Н	L	PCM**	Part number	
1000 pF	5	13	19	15	MPRYOW 1100FC00	5	13	19	15	MPRY2W1100FC00	
1500 "	5	13	19	15	MPRYOW 1150FC00	5	13	19	15	MPRY2W1150FC00	
2200 "	5	13	19	15	MPRY0W1220FC00	5	13	19	15	MPRY2W1220FC00	
3300 "	5	13	19	15	MPRYOW1330FC00	5	13	19	15	MPRY2W1330FC00	
4700 "	6	14	19	15	MPRY0W1470FD00	6	14	19	15	MPRY2W1470FD00	
6800 "	7	15	19	15	MPRY0VV1680FE00	7	15	19	15	MPRY2W1680FE00	
0.01 µF	8	17	19	15	MPRY0VV2100FF00	8	17	19	15	MPRY2W2100FF00	
0.015 "	10	18	19	15	MPRY0W2150FG00	10	18	19	15	MPRY2W2150FG00	
0.022 "	8	20	28	22.5	MPRY0W2220FH00	8	20	28	22.5	MPRY2W2220FH00	
0.033 "	8	20	28	22.5	MPRY0W2330FH00	8	20	28	22.5	MPRY2W2330FH00	
0.047 "	10	22	28	22.5	MPRY0VV2470FI00	10	22	28	22.5	MPRY2W2470FI00	
0.068 "	12	24	28	22.5	MPRY0VV2680FJ00	12	24	28	22.5	MPRY2VV2680FJ00	
0.1 µ F	13	25	33	27.5	MPRY0VV3100FK00	13	25	33	27.5	MPRY2VV3100FK00	

^{*} f = 50/60 Hz

New voltage range

** PCM = Printed circuit module = pin spacing

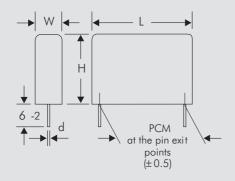
Upon request with long pins 35-2 mm max.

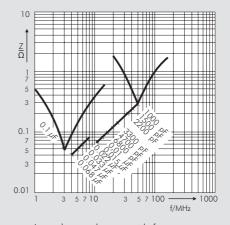
Dims. in mm.

 $d = 0.8 \, \emptyset$

Part number completion:

Tolerance: 20 % = MPacking: bulk = S Pin length: 6-2 = SDTaped version see page 148.





Impedance change with frequency (general guide)

Rights reserved to amend design data without prior notification.

Recommendation for Processing and Application of **Through-Hole Capacitors**



Soldering Process

A preheating of through-hole WIMA capacitors is allowed for temperatures $T_{\text{max}} < 100 \,^{\circ} \text{C}.$

In practice a preheating duration of t < 5 min. has been proven to be best.

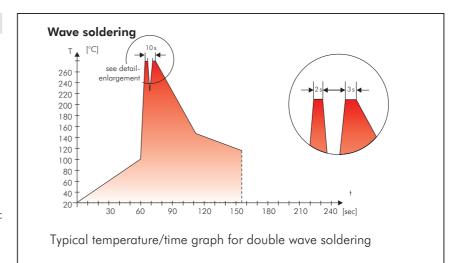
Single wave soldering

Soldering bath temperature: $T < 260^{\circ} C$ Immersion time: t < 5 sec

Double wave soldering

Soldering bath temperature: $T < 260^{\circ} C$ Immersion time: $2 \times t < 3 \text{ sec}$

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 VDE inspectorate 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 of WPCS during production process:

- incoming material inspection
- metallization
- film inspection
- schoopage
- pre-healing
- pin attachment
- cast resin preparation/ encapsulation
- 100% final inspection
- AQL check

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
- PRR/PRDE
- PCB
- Arsenic
- CFC
- Hydrocarbon chloride
- Cadmium
- Chromium 6+
- Mercury

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/EC 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 refraind from using such substances since years already.



Tape for lead-free WIMA capacitors

DIN EN ISO 14001:2004

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

Typical Dimensions for Taping Configuration



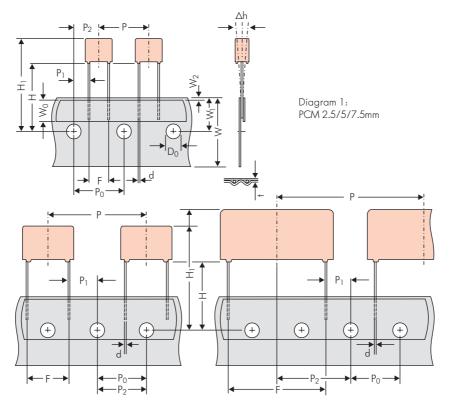


Diagram 2: PCM 10/15 mm

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	rrier 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				
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	Р	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	Po	cumulative pitch 12.7 ±0.3 error max. 1.0 mm/20 pitch	12.7 ±0.3 cumulative pitch error max.	cumulative pitch 12.7 ±0.3 error max. 1.0 mm/20 pitch	cumulative pitch 12.7 ±0.3 error max. 1.0 mm/20 pitch	cumulative pitch 12.7 ±0.3 error max. 1.0 mm/20 pitch	cumulative pitch 12.7 ±0.3 error max. 1.0 mm/20 pitch	cumulative pitc 12.7 ±0.3 error max. 1.0 mm/20 pitc				
Feed hole centre to pin	P ₁	5.1 ±0.5	3.85 ±0.7	2.6 ±0.7	2.6 ±0.7 7.7 ±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	Н	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				
edge of the component	11	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		H+H _{component} < H ₁ 35.0 to 45.0				
Pin spacing at upper edge of carrier tape	1 F 1 75 ±05		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.	\pm 2.0 max.	\pm 3.0 max.	± 3.0 max.	\pm 3.0 max.	\pm 3.0 max.	± 3.0 max.				
Total tape thickness	t	0.7 ±0.2	0.7 ±0.2	0.7 ±0.2	0.7 ±0.2	0.7 ±0.2	0.7 ±0.2	0.7 ±0.2				
6. 1		ROLL/A	OMMA	AMMO								
Package (see also page 149)		REEL \$\times 360 max. \$\times 30 \pm 1\$	$B \begin{array}{c} 52 \pm 2 \\ 58 \pm 2 \end{array} ight\} \begin{array}{c} ext{depending on} \\ ext{comp. dimensions} \end{array}$	REEL # 350 max. B 58 ±2 or REEL # 500 max. B 58 ±2 or 8 = 8 ±0 ±2 B ±0 ±0 ±0 ±0 ±0 ±0 ±0 ±0 ±0 ±0 ±0 ±0 ±0								
Unit					see details page 150.							

Dims in mm.

Please clarify customer-specific deviations with the manufacturer.

Diameter of pins see General Data.

 $^{^{\}rm t}$ PCM 10 and PCM 15 can be crimped to PCM 7.5. Position of components according to PCM 7.5 (sketch 1). $\rm P_0=12.7$ or 15.0 is possible

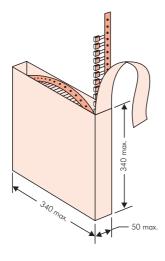
Types of Tape Packaging of Capacitors for Automatic Radial Insertion

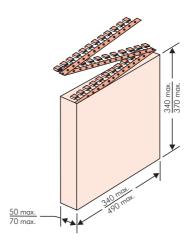


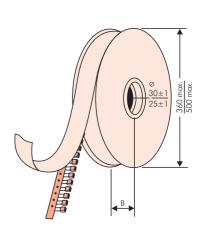
■ ROLL Packaging

■ AMMO Packaging

■ REEL Packaging







-BAR CODE (Labelling)

Labelling of package units in plain text and with 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.



BARCODE "Code 39"

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



						1	AMMO			
PCM	Size		bulk	ROLL	Ø 360	EL Ø 500	340 × 340	MO 490 × 370		
	W	Н	l ı	Codes	S	H16.5 H18.5	H16.5 H18.5	H16.5 H18.5	H16.5 H18.5	H16.5 H18.5
	2.5	7	4.6	OB	5000	2200	2500	-	2800	-
2 5	3	7.5	4.6	0C	5000	2000	2300	-	2300	-
2.5 mm	3.8 4.6	8.5 9	4.6 4.6	OD OE	5000 5000	1500 1200	1800 1500	- -	1800 1500	-
	5.5	10	4.6	0F	5000	900	1200	_	1200	_
	2.5	6.5	7.2	1A	5000	2200	2500	_	2800	_
	3	7.5	7.2	1B	5000	2000	2300	-	2300	-
	3.5 4.5	8.5 6	7.2 7.2	1C 1D	5000 6000	1600 1300	2000 1500	_ _	2000 1500	_
	4.5	9.5	7.2	1E	4000	1300	1500	_	1500	_
	5	10	7.2	1F	3500	1100	1400	-	1400	-
5 mm	5.5	7	7.2	1G	4000	1000	1200	-	1200	-
	5.5 6.5	11.5 8	7.2 7.2	1H 1I	2500 2500	1000 800	1200 1000	_	1200 1000	_
	7.2	8.5	7.2	1J	2500	700	1000	_	1000	_
	7.2	13	7.2	1K	2000	700	950	-	1000	-
	8.5 8.5	10 14	7.2 7.2	1L 1M	2000 1500	600	800 800	- -	800 800	-
	11	16	7.2	1M	1000	500	600	_	400	_
	2.5	7	10	2A	5000	_	2500	4400	2500	-
	3	8.5	10	2B	5000	_	2200	4300	2300	4150
7.5 mm	4 4.5	9 9.5	10 10.3	2C 2D	4000 3500		1 <i>7</i> 00 1500	3200 2900	1 <i>7</i> 00 1400	3100 2800
7.5 111111	5	10.5	10.3	2E	3000	_	1300	2500	1300	2000
	5.7	12.5	10.3	2F	2000	_	1000	2200	1100	-
	7.2	12.5	10.3	2G	1500	_	900	1800	1000	-
	3	9	13	3A FA	3000	-	1100	2200	-	1900
	4	8.5 9	13.5 13	3C	3000 3000	_	900 900	1600 1600	_	1450 1450
	4	9.5	13	3D	3000	_	900	1600	_	1400
10 mm	5	10	13.5	FB	2000	-	700	1300	-	1200
	5	11 12	13 13	3F 3G	3000 2400		700 550	1300 1100	_	1200 1000
	6	12.5	13	3H	2400	_	550	1100	_	1000
	8	12	13	31	2000	_	400	800	-	740
	5	11	18	4B	2400	-	600	1200	-	1150
	5	13 12.5	19 18	FC 4C	1000 2000	_	600 500	1200 1000	_	1200 1000
	6	14.5	19	FD	1000	_	500	1000	_	1000
	7	14	18	4D	1600	-	450	900	-	850
15 mm	7	15	19	FE 4E	1000	-	450	900	-	850
13 111111	8	15 17	18 19	4F FF	1200 500	_	400 400	800 800	_	740 740
	9	14	18	4H	1200	_	350	700	-	650
	9	16	18	4J	900	-	350	700	-	650
	10	18 14	19 18	FG 4M	500 1000	_	300 300	650 600	_	590 540
	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
00.5	8 8.5	20 18.5	28 26.5	FH 5F	500 500	-	-	500 480	-	480 450
22.5 mm	10	22	28	FI	540*	_	-	420	-	380
	10.5	19	26.5	5G	680*	-	-	400	-	360
	10.5	20.5	26.5	5H	680* 490*	-	-	400	-	360
	11 12	21 24	26.5 28	5I FJ	680* 450*	_	-	380 350	-	350 310
	12	L 44	20	FJ	450			000		010

^{*} 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



	pcs. per packing unit														
					ROLL			REEL			l	AMMO			
PCM	Size				bulk			ø 360		Ø 500		340 × 340		490 × 370	
					H16.		H18.5	H16.5 H18.5		H16.5	H18.5	H16.5	H18.5	H16.5	H18.5
	W	Н	L	Codes	S	N O		F	I	Н	J	Α	С	В	D
	9	19	31.5	6A	640*	_		_		460/	340*		_	420	
	11	21	31.5	6B	544*	-	-	_	-	380/	280*		_	3	50
	13	24	31.5	6D	448*	-	-	_	-	3	00		_	2	90
	13	25	33	FK	336*	-	-	-	-	-	-		_	-	-
07.5	15	26	31.5	6F	384*	-	-	-	-	2	70		-	2	50
27.5 mm	15	26	33	FL	288*	-	-	-	-	-	-		_	-	-
	17	29	31.5	6G	176*	-	-	-	-	-	-		_	-	
	17	34.5	31.5	61	176*	-	-	_	-	-	-		-	-	
	19 20	30 32	31.5 33	6L FM	50* 216*	-	-	-	-	-	-		_ _	-	-
	20	39.5	31.5	6J	144*	_		-	-	_		_		-	
	9	19	41.5	7A	480*			_		_				_	_
	11	22	41.5	7B	408*		-	_	-		_		_	_	_
	13	24	41.5	7C	252*	-	-	_	-	-	-		_	-	-
	15	26	41.5	7D	144*	-	-	_	-	-	-		_	-	-
27 5	17	29	41.5	7E	132*	-		-	-	-		-		-	
37.5 mm	19	32	41.5	7F	108*	-	-	-	-	-		-		-	
	20 24	39.5 45.5	41.5 41.5	7G 7H	108* 84*	-	-	_	-	-		_		_	
	31	45.5	41.5	7H	72*	-	-	_	-	_		_		_	
	35	50	41.5	7j	35*			_	- -		_		_ _	_	
	40	55	41.5	7K	28*	-	-	_	-	-	-		_	-	-
	19	31	56	8D	50*	_	-	_	-	_	-		_	-	-
40.5	23	34	56	8E	72*	-	-	-	-	-	-		_	-	-
48.5 mm	27	37.5	56	8H	60*	-	-	-	-	-	-		-	-	-
	33 37	48 54	56 56	8J 8L	48* 25*	-		-	-	-	-	-		_	
	35	50	57	9F	25*										
52.5 mm	45	55	57	9H	20*						_		_		
J 2.5	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.

-WIMA Part Number System



 $340 \times 340 = A$ $490 \times 370 = B$ $340 \times 340 = C$ $490 \times 370 = D$

= F

=H

= |=J=N= \bigcirc

 $= \mathsf{P}$

=Q

=R

=T

=S

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

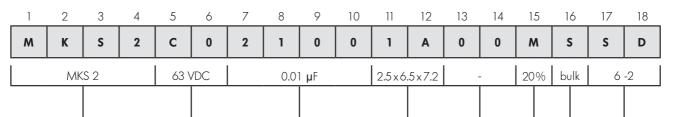
Field 11 - 12: Size and PCM

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

Field 15: Capacitance tolerance

Field 16: Packing

Field 17 - 18: Lead length (untaped)



Type description	on:	Rated voltage:	Capacitance:	Size:	Tolerance:
SMD-PET	= SMDT	2.5 VDC = A1	22 pF = 0022	4.8 x 3.3 x 3 Size 1812 = KA	20% = M
SMD-PPS	= SMDI	4 VDC = A2	47 pF = 0047	4.8 x 3.3 x 4 Size 1812 = KB	10% = K
FKP 02	= FKPO	14 VDC = A3	100 pF = 0100	$5.7 \times 5.1 \times 3.5 \text{ Size } 2220 = QA$	5% = J
MKS 02	= MKS0	28 VDC = A4	150 pF = 0150	$5.7 \times 5.1 \times 4.5 \text{ Size } 2220 = QB$	2.5% = H
FKS 2	= FKS2	40 VDC = A5	220 pF = 0220	$7.2 \times 6.1 \times 3$ Size 2824 = TA	1% = E
FKP 2	= FKP2	5 VDC = A6	330 pF = 0330	$7.2 \times 6.1 \times 5$ Size 2824 = TB	
MKS 2	= MKS2	50 VDC = B0	470 pF = 0470	$10.2 \times 7.6 \times 5$ Size $4030 = VA$	
MKP 2	=MKP2	63 VDC = C0	680 pF = 0680	$12.7 \times 10.2 \times 6 \text{ Size } 5040 = XA$	D 1.
FKS 3	= FKS3	100 VDC = D0	1000 pF = 1100	$15.3 \times 13.7 \times 7 \text{ Size } 6054 = \text{YA}$	Packing:
FKP 3	= FKP3	160 VDC = E0	1500 pF = 1150	$2.5 \times 7 \times 4.6 \text{ PCM} 2.5 = 0B$	AMMO H16.5 340 x
MKS 4	= MKS4	250 VDC = FO	2200 pF = 1220	$3 \times 7.5 \times 4.6 \text{ PCM } 2.5 = 0 \text{C}$	AMMO H16.5 490 x
MKP 4	= MKP4	400 VDC = G0	3300 pF = 1330	$2.5 \times 6.5 \times 7.2 \text{ PCM}5 = 1A$	AMMO H18.5 340 x
MKP 10	=MKP1	450 VDC = H0	4700 pF = 1470	$3 \times 7.5 \times 7.2 \text{ PCM} 5 = 1B$	AMMO H18.5 490 x
FKP 4	= FKP4	600 VDC = 10	6800 pF = 1680	$2.5 \times 7 \times 10 \text{ PCM} 7.5 = 2A$	REEL H16.5 360
FKP 1	= FKP1	630 VDC = J0	$0.01 \mu F = 2100$	$3 \times 8.5 \times 10 \text{ PCM} 7.5 = 2B$	REEL H16.5 500
MKP-X2	= MKX2	700 VDC = KO	$0.022 \mu F = 2220$	$3 \times 9 \times 13 \text{ PCM } 10 = 3A$	REEL H18.5 360
MKP-X2 R	= MKXR	800 VDC = 10	$0.047 \mu F = 2470$	$4 \times 9 \times 13 \text{ PCM } 10 = 3C$	REEL H18.5 500
MKP-Y2	= MKY2	850 VDC = M0	$0.1 \mu F = 3100$	$5 \times 11 \times 18 \text{ PCM } 15 = 4B$	ROLL H16.5
MP 3-X2	=MPX2	900 VDC = NO	$0.22 \mu F = 3220$	$6 \times 12.5 \times 18 \text{ PCM } 15 = 4C$	ROLL H18.5
MP 3-X1	=MPX1	1000 VDC = 01	$0.47 \mu F = 3470$	$5 \times 14 \times 26.5 \text{ PCM } 22.5 = 5A$	BLISTER W12 180
MP 3-Y2	=MPY2	1100 VDC = P0	$1 \mu F = 4100$	$6 \times 15 \times 26.5 \text{ PCM } 22.5 = 5B$	BLISTER W12 330
MP 3R-Y2	= MPRY	1200 VDC = Q0	$2.2 \mu F = 4220$	$9 \times 19 \times 31.5 \text{ PCM } 27.5 = 6A$	BLISTER W16 330
Snubber MKP	= SNMP	1250 VDC = R0	$4.7 \mu F = 4470$	$11 \times 21 \times 31.5 \text{ PCM } 27.5 = 6B$	BLISTER W24 330
Snubber FKP	= SNFP	1500 VDC = S0	$10 \mu F = 5100$	$9 \times 19 \times 41.5 \text{ PCM} 37.5 = 7A$	Bulk/TPS Standard
GTO MKP	= GTOM	1600 VDC = T0	$22 \mu F = 5220$	$11 \times 22 \times 41.5 \text{ PCM} 37.5 = 7B$	
DC-LINK MKP 3		2000 VDC = U0	$47 \mu F = 5470$	$94 \times 49 \times 182 \text{ DCH}_{-} = H0$	
DC-LINK MKP 4		2500 VDC = V0	$100 \mu F = 6100$	$94 \times 77 \times 182 \text{ DCH}_{-} = \text{H1}$	
DC-LINKMKP4S		3000 VDC = W0	$220 \ \mu F = 6220$	1	
DC-LINK MKP 5		4000 VDC = X0	1 F = A010		I
DC-LINK MKP 6		6000 VDC = Y0	2.5 F = A025	Version code:	
DC-LINK HC	= DCH_	250 VAC = 0VV	50 F = A500	ı	Lead length (untar
DC-LINK HY	= DCHY	275 VAC = 1 W	100 F = B100	Standard = 00	, , ,
SuperCap C	= SCSC	300 VAC = 2W	110 F = B110	Version Al I I I I I I I I I I I I I I I I I I	$3.5 \pm 0.5 = C9$
SuperCap MC		400 VAC = 3W	600 F = B600	Version A1.1.1 = 1B	6 - 2 = SD
SuperCap C60		$\begin{array}{ccc} 440 \text{ VAC} &= 4W \\ 500 \text{ VAC} & 5M \end{array}$	1200 F = C120	Version A2 = 2A	$16 \pm 1 = P1$
SuperCap R	= SCSR	500 VAC = 5W			
SuperCap MR	= MRPP	I	1	I	

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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.