PMB

Metallized polypropylene film capacitor
MKP - Snubber capacitor

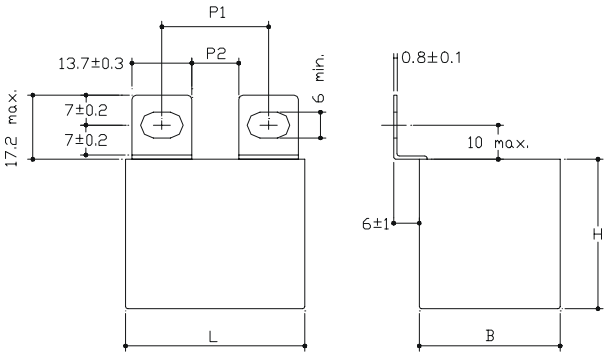
Main applications: Snubber, energy conversion and control in power semiconductor circuits, IGBT modules protection and SMPS protection circuits, high voltage, high current and high pulse applications

Dielectric	Polypropylene
Electrodes	Vacuum deposited metal layers
Coating	Solvent resistant plastic case with resin sealing. Flame retardant execution (UL 94 V-0)
Construction	Extended double side metallized carrier film with internal series connection and metallized film (refer to general technical information)
Leads	Tinned copper lugs for screw fixing or soldering on PCBs (please refer to article table)
Degree of protection	IP00
Installation	Whatever position assuring correct heat dissipation. Arrangement of many components with box walls in contact not admitted; suggested minimum distance between side by side elements ≥ 1/8 of the box thickness.
Reference standard	IEC 61071, IEC 60068
Climatic category	40/85/56 (IEC 60068/1), GPD (DIN40040)
Operating temperature range(case)	-40°...+85°C
Max. permissible ambient temperature	+70°C (operation at rated power, rated current and natural cooling)
Rated capacitance (Cr)	0,047µF to 5,6µF. Refer to article table
Capacitance tolerance (at 1kHz)	±10% (code=K), ±5% (code=J) and ±20% (code=M). Other tolerances upon request
Capacitance temperature coefficient	Refer to graphs in general technical information
Long term stability (at 1kHz)	Capacitance variation≤ ±1% after a period of 2 years at standard environmental conditions
Rated voltage (Ur)	700, 850, 1000, 1200, 1500, 2000, 2500, 3000 Vdc
Non Recurrent Surge Voltage (Upk)	1000, 1200, 1400, 1600, 2000, 2400, 3000, 3500 Vdc
Self inductance	≤ 1nH/mm of fixing pitch
Maximum pulse rise time	Refer to article table
Maximum peak current (Ipeak)	Refer to article table. Max. non repetitive Ipk = 1,5 x Ipeak
Dissipation factor (DF), max.	(tgδ x10^{-4}, measured at 25±5°C)

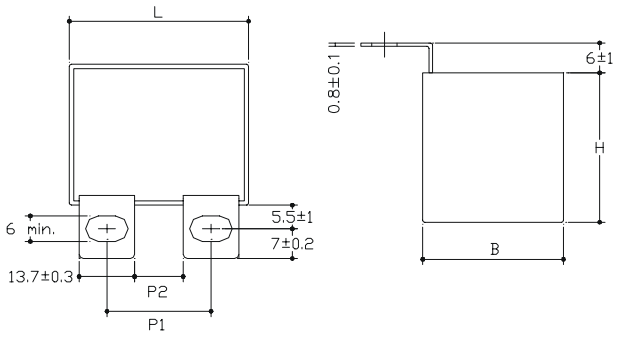
Freq.	Cr ≤ 1,0µF	Cr> 1,0µF
1kHz	4	6

Insulation resistance (IR)	30000s but need not exceed 30GΩ (typical value), after 1 minute of electrification at 100Vdc (25 ± 5°C).
Test voltage between terminals (Ut)	2xUr (DC) applied for 10s at 25±5°C (1 minute for type test)
Test voltage between terminals and case (Utc)	3kV 50÷60Hz applied for 60s at 25±5°C
Damp heat test (steady state)	**Test conditions:** Temperature= +40±2°C; Relative humidity= 93±2%; Test Duration= 56 days — **Performance:** Capacitance change≤ ±2%; DF change≤ 0,0010 at 1kHz; IR≥ 50% of initial limit value
Typical capacitance change versus operating time	-3% after 30'000 hours at Urms or after 100'000 hours at Ur
Life expectancy	≥ 30'000 hours
Failure quota	300/10^9 component hours

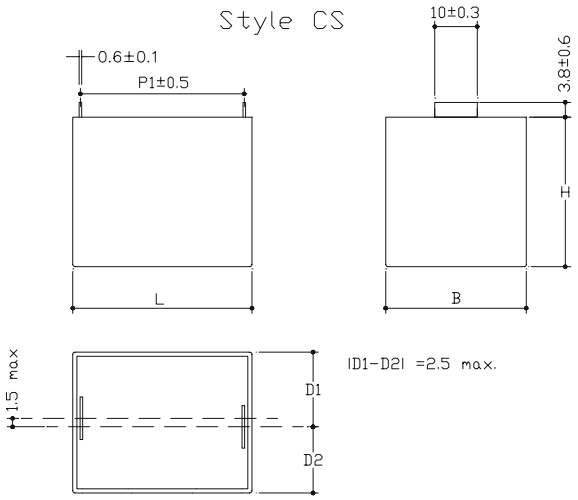
Style SP/SR



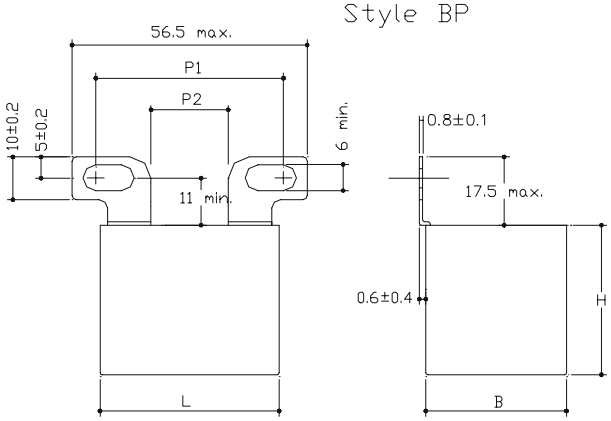
Style VP/VR



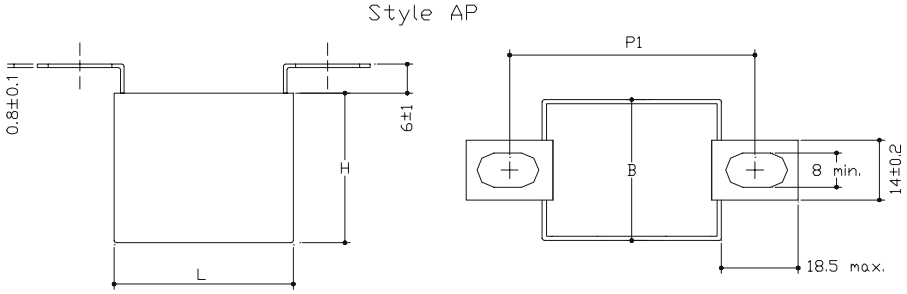
Style CS



Style BP



Style AP



Fixing pitch and distance between lugs (mm)												
L	Style SP		Style SR		Style VP		Style VR		Style BP		Style AP	Style CS
	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P1
42.5	23÷28 (M6)	11	20÷25 (M6)	8	23÷28 (M6)	11	20÷25 (M6)	8	34÷45 (M6)	17	51÷64 (M8)	38.5
57.5	37÷42 (M6)	24	34÷39 (M6)	21	37÷42(M6)	24	34÷39 (M6)	21	-	-	65÷78 (M8)	52.5

PMB

PMB article table (different values available upon request)

Ur Vdc	Urms Vac(4)	Upk Vdc	Cap. µF	Dimension in mm B	H	L	du/dt V/µs	Ipeak A	Irms(2) A	ESR(3) mΩ	ICEL Code(1)
700	380	1000	1,2	24,5	27,5	42,5	325	390	16,5	3,1	PMB1704120*##
700	380	1000	2	33,5	35,5	42,5	325	650	22	2,5	PMB1704200*##
700	380	1000	2,5	33,5	35,5	42,5	325	812	23	2,2	PMB1704250*##
700	380	1000	3	33	45	42,5	325	975	26	2,1	PMB1704300*##
700	380	1000	3,5	33	45	42,5	325	1140	27	2	PMB1704350*##
700	380	1000	4	30	45	57,5	200	800	27	2,3	PMB1704400*##
700	380	1000	4,7	35	50	57,5	200	940	31	2,1	PMB1704470*##
700	380	1000	5,6	35	50	57,5	200	1120	32	2	PMB1704560*##
850	450	1200	0,82	24,5	27,5	42,5	400	328	15,5	3,1	PMB1853820*##
850	450	1200	1	24,5	27,5	42,5	400	400	17,5	2,7	PMB1854100*##
850	450	1200	1,5	33,5	35,5	42,5	400	600	23	2,2	PMB1854150*##
850	450	1200	1,75	33,5	35,5	42,5	400	700	23,5	2,2	PMB1854175*##
850	450	1200	2	33	45	42,5	400	800	26,5	2	PMB1854200*##
850	450	1200	2,2	33	45	42,5	400	880	27	2	PMB1854220*##
850	450	1200	2,5	33	45	42,5	400	1000	28	1,9	PMB1854250*##
850	450	1200	3	30	45	57,5	275	825	28,5	2,2	PMB1854300*##
850	450	1200	3,3	30	45	57,5	275	907	29,5	2,1	PMB1854330*##
850	450	1200	4	35	50	57,5	275	1100	32	1,9	PMB1854400*##
1000	480	1400	0,68	24,5	27,5	42,5	500	340	15	3,3	PMB2103680*##
1000	480	1400	0,75	24,5	27,5	42,5	500	375	15,5	3,2	PMB2103750*##
1000	480	1400	1,2	33,5	35,5	42,5	500	600	22	2,5	PMB2104120*##
1000	450	1400	1,5	33,5	35,5	42,5	500	750	23,5	2,2	PMB2104150*##
1000	450	1400	1,75	33	45	42,5	500	875	25,5	2,1	PMB2104175*##
1000	450	1400	2	33	45	42,5	500	1000	26,5	2	PMB2104200*##
1000	450	1400	2,2	30	45	57,5	320	704	26,5	2,5	PMB2104220*##
1000	450	1400	3	35	50	57,5	320	960	31	2,1	PMB2104300*##
1000	450	1400	3,3	35	50	57,5	320	1060	32	2	PMB2104330*##
1200	500	1600	0,33	24,5	27,5	42,5	650	210	12	5,1	PMB2123330*##
1200	500	1600	0,39	24,5	27,5	42,5	650	254	13	4,6	PMB2123390*##
1200	500	1600	0,47	24,5	27,5	42,5	650	306	14	4,1	PMB2123470*##
1200	500	1600	0,56	24,5	27,5	42,5	650	365	14,5	3,7	PMB2123560*##
1200	500	1600	0,68	33,5	35,5	42,5	650	442	19	3,3	PMB2123680*##
1200	500	1600	0,82	33,5	35,5	42,5	650	533	20	3	PMB2123820*##
1200	500	1600	1	33,5	35,5	42,5	650	650	20,5	2,7	PMB2124100*##
1200	500	1600	1,2	33	45	42,5	650	780	23,5	2,4	PMB2124120*##
1200	500	1600	1,5	33	45	42,5	650	975	25	2,1	PMB2124150*##
1200	500	1600	2	30	45	57,5	350	700	27	2,4	PMB2124200*##
1200	500	1600	2,2	35	50	57,5	350	770	30	2,3	PMB2124220*##
1200	500	1600	2,5	35	50	57,5	350	875	31	2,1	PMB2124250*##
1500	575	2000	0,33	24,5	27,5	42,5	800	264	13,5	4,6	PMB2153330*##
1500	575	2000	0,39	24,5	27,5	42,5	800	312	14	4,3	PMB2153390*##
1500	575	2000	0,47	33,5	35,5	42,5	800	376	18	3,7	PMB2153470*##
1500	575	2000	0,68	33,5	35,5	42,5	800	544	19,5	3,1	PMB2153680*##
1500	575	2000	0,75	33,5	35,5	42,5	800	600	20,5	2,8	PMB2153750*##
1500	575	2000	1,0	33	45	42,5	800	800	23	2,5	PMB2154100*##
1500	575	2000	1,2	30	45	57,5	500	600	25	2,8	PMB2154120*##
1500	575	2000	1,5	35	50	57,5	500	750	28	2,5	PMB2154150*##
1500	575	2000	1,8	35	50	57,5	500	900	29,5	2,3	PMB2154180*##
2000	630	2400	0,1	24,5	27,5	42,5	1000	100	8	13	PMB2203100*##
2000	630	2400	0,15	24,5	27,5	42,5	1000	150	10,5	7,5	PMB2203150*##
2000	630	2400	0,22	24,5	27,5	42,5	1000	220	12	5,1	PMB2203220*##
2000	630	2400	0,33	33,5	35,5	42,5	1000	330	16,5	4,1	PMB2203330*##
2000	630	2400	0,39	33,5	35,5	42,5	1000	390	17,5	3,6	PMB2203390*##
2000	630	2400	0,47	33	45	42,5	1000	470	20,5	3,2	PMB2203470*##
2000	630	2400	0,56	33	45	42,5	1000	560	21,5	3	PMB2203560*##
2000	630	2400	0,68	30	45	57,5	580	394	22,5	3,5	PMB2203680*##
2000	630	2400	0,82	30	45	57,5	580	475	24	3,1	PMB2203820*##
2000	630	2400	1	35	50	57,5	580	580	27	2,8	PMB2204100*##
2000	630	2400	1,2	35	50	57,5	580	696	29	2,4	PMB2204120*##

(1)Change the * symbol with the needed capacitance tolerance code: J=±5%, K=±10%, M=±20% and the ## characters with the needed style code - (2) Maximum values at 100kHz, +70°C - (3) Typical values at 100kHz- (4)Not suitable for across the line application.

PMB

Ur Vdc	Urms Vac(4)	Upk Vdc	Cap. µF	Dimension in mm B	H	L	du/dt V/µs	Ipeak A	Irms(2) A	ESR(3) mΩ	ICEL Code(1)
2500	700	3000	0,1	24,5	27,5	42,5	1350	135	9	11,2	PMB2253100*##
2500	700	3000	0,15	24,5	27,5	42,5	1350	202	11	7,2	PMB2253150*##
2500	700	3000	0,22	33,5	35,5	42,5	1350	297	15	5,2	PMB2253220*##
2500	700	3000	0,33	33,5	35,5	42,5	1350	445	18	3,8	PMB2253330*##
2500	700	3000	0,47	33	45	42,5	1350	634	22	3	PMB2253470*##
2500	700	3000	0,56	30	45	57,5	750	420	22,5	3,5	PMB2253560*##
2500	700	3000	0,68	35	50	57,5	750	510	25	3,2	PMB2253680*##
2500	700	3000	0,82	35	50	57,5	750	615	26	2,9	PMB2253820*##
3000	750	3500	0,047	24,5	27,5	42,5	1600	75	7,5	16,5	PMB2302470*##
3000	750	3500	0,068	24,5	27,5	42,5	1600	109	9	11,5	PMB2302680*##
3000	750	3500	0,1	33,5	35,5	42,5	1600	160	12	8,5	PMB2303100*##
3000	750	3500	0,15	33,5	35,5	42,5	1600	240	14,5	6,1	PMB2303150*##
3000	750	3500	0,22	33	45	42,5	1600	352	18	4,3	PMB2303220*##
3000	750	3500	0,33	30	45	57,5	875	288	20,5	4,3	PMB2303330*##
3000	750	3500	0,47	35	50	57,5	875	411	23	3,8	PMB2303470*##

(1)Change the * symbol with the needed capacitance tolerance code: J=±5%, K=±10%, M=±20% and the ## characters with the needed style code - (2) Maximum values at 100kHz, +70°C - (3) Typical values at 100kHz - (4)Not suitable for across the line application.

Warning

This specification must be completed with the data given in the "General technical information" chapter