PMS

Metallized polypropylene film capacitor
MKP - Switching/snubber - High current

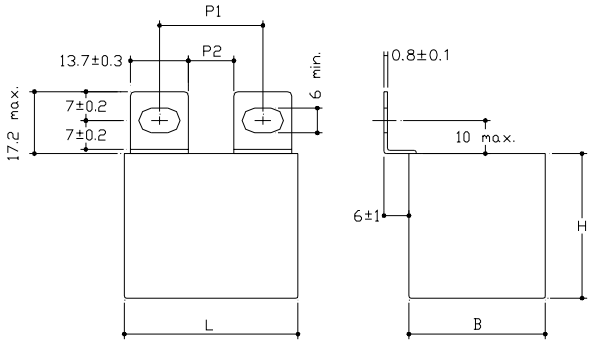
Main applications: Snubber, energy conversion and control in power semiconductor circuits, resonant circuits, industrial and motor speed controls, SMPS, induction heaters, high voltage, high current and medium-high pulse applications

Dielectric	Polypropylene
Electrodes	Vacuum deposited metal layers
Coating	Solvent resistant plastic case with resin sealing. Flame retardant execution (UL 94 V-0)
Construction	Extended metallized film with internal series connection(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)	0,068µF to 9µF. 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)

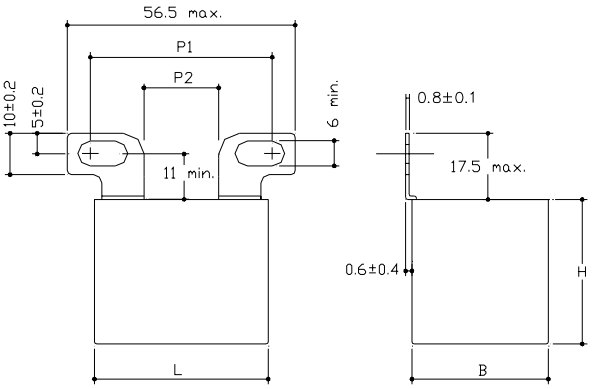
Freq.	Cr ≤ 1µF	Cr> 1µF
1kHz	5	6

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

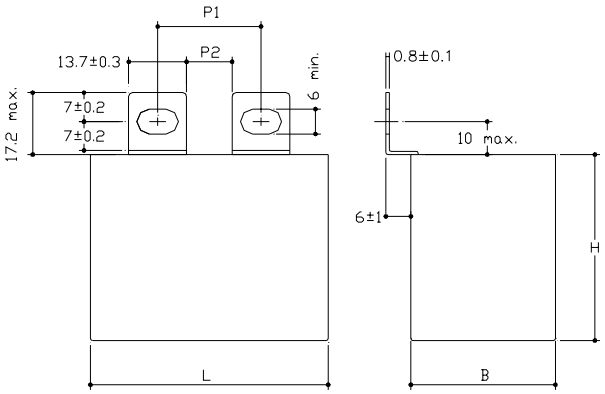
Style SP / SR



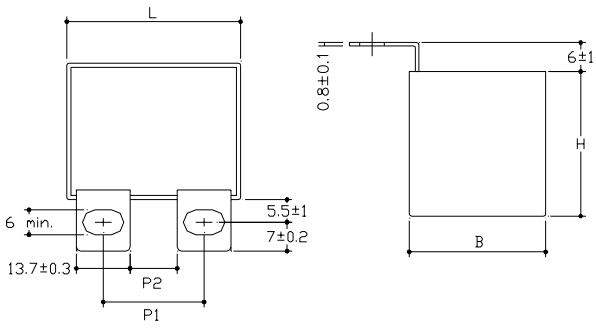
Style BP (Not available for L=57.5mm box)



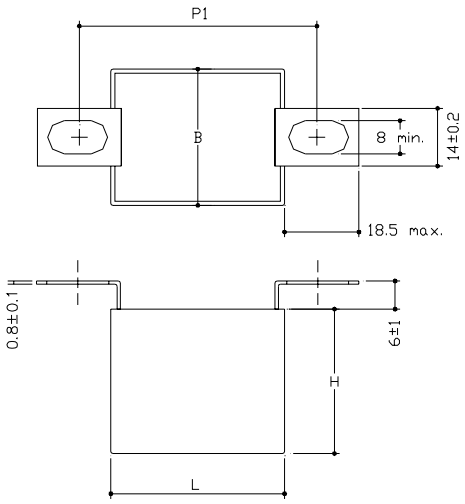
Style SN (for L=57.5mm box only)



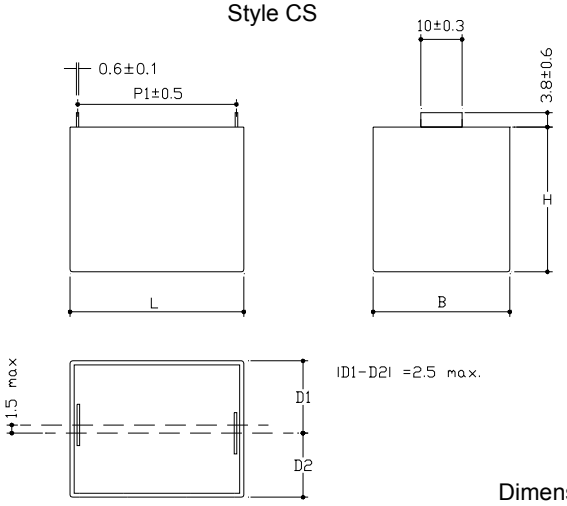
Style VP / VR



Style AP



Style CS



Dimensions in mm

Fixing pitch and distance between lugs (mm)														
L	Style SP		Style SR		Style VP		Style VR		Style SN		Style BP		Style AP	Style CS
	P1	P2	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	Not available		32÷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	23÷28 (M6)	11	Not available		65÷78 (M8)	52.5

PMS

PMS 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	1,5	24,5	27,5	42,5	130	195	15	3,5	PMS1704150*##
700	380	1000	2	24,5	35,5	42,5	130	260	16	3,1	PMS1704200*##
700	380	1000	3	33,5	35,5	42,5	130	390	21	2,6	PMS1704300*##
700	380	1000	3,3	33,5	35,5	42,5	130	429	21,5	2,5	PMS1704330*##
700	380	1000	4	33,5	35,5	42,5	130	520	22,5	2,2	PMS1704400*##
700	380	1000	4,7	33	45	42,5	130	611	26,5	1,9	PMS1704470*##
700	380	1000	5	33	45	42,5	130	650	27	1,9	PMS1704500*##
700	380	1000	5,6	33	45	42,5	130	728	27,5	1,7	PMS1704560*##
700	380	1000	6,8	30	45	57,5	90	612	27	2,3	PMS1704680*##
700	380	1000	9	35	50	57,5	90	810	31,5	1,9	PMS1704900*##
850	450	1200	1,2	24,5	27,5	42,5	200	240	15,5	3,3	PMS1854120*##
850	450	1200	2,2	33,5	35,5	42,5	200	440	22,5	2,3	PMS1854220*##
850	450	1200	2,5	33,5	35,5	42,5	200	500	23,5	2,1	PMS1854250*##
850	450	1200	2,7	33,5	35,5	42,5	200	540	24	2	PMS1854270*##
850	450	1200	3	33	45	42,5	200	600	26	1,9	PMS1854300*##
850	450	1200	3,3	33	45	42,5	200	660	27	1,8	PMS1854330*##
850	450	1200	4	33	45	42,5	200	800	28	1,7	PMS1854400*##
850	450	1200	4,7	30	45	57,5	110	517	27,5	2,2	PMS1854470*##
850	450	1200	5	30	45	57,5	110	550	28	2,2	PMS1854500*##
850	450	1200	5,6	35	50	57,5	110	616	31,5	1,9	PMS1854560*##
850	450	1200	6	35	50	57,5	110	693	32	1,8	PMS1854600*##
1000	480	1400	1	24,5	27,5	42,5	225	225	15,5	3,3	PMS2104100*##
1000	480	1400	2	33,5	35,5	42,5	225	450	23	2,1	PMS2104200*##
1000	480	1400	2,5	33	45	42,5	225	562	27	1,8	PMS2104250*##
1000	480	1400	3,3	30	45	57,5	135	445	26	2,4	PMS2104330*##
1000	480	1400	4,7	35	50	57,5	135	634	31,5	1,9	PMS2104470*##
1200	500	1600	0,68	24,5	27,5	42,5	255	173	13,5	4,1	PMS2123680*##
1200	500	1600	1,5	33,5	35,5	42,5	255	382	21	2,6	PMS2124150*##
1200	500	1600	2	33	45	42,5	255	510	26	2	PMS2124200*##
1200	500	1600	2,2	33	45	42,5	255	561	26,5	1,9	PMS2124220*##
1200	500	1600	2,5	30	45	57,5	150	375	26	2,4	PMS2124250*##
1200	500	1600	3	35	50	57,5	150	450	30	2,1	PMS2124300*##
1200	500	1600	3,3	35	50	57,5	150	495	30,5	2	PMS2124330*##
1500	575	2000	0,33	24,5	27,5	42,5	320	106	12	5,6	PMS2153330*##
1500	575	2000	0,47	24,5	27,5	42,5	320	150	13,5	4,5	PMS2153470*##
1500	575	2000	0,68	33,5	35,5	42,5	320	218	18	3,8	PMS2153680*##
1500	575	2000	1	33,5	35,5	42,5	320	320	21	2,6	PMS2154100*##
1500	575	2000	1,3	33	45	42,5	320	432	25	2,1	PMS2154130*##
1500	575	2000	1,5	30	45	57,5	175	262	23	3,1	PMS2154150*##
1500	575	2000	2	35	50	57,5	175	350	27	2,6	PMS2154200*##
1500	575	2000	2,2	35	50	57,5	175	385	27,5	2,5	PMS2154220*##
2000	630	2400	0,22	24,5	27,5	42,5	410	90,2	11	6,4	PMS2203220*##
2000	630	2400	0,27	24,5	27,5	42,5	410	111	11,5	5,7	PMS2203270*##
2000	630	2400	0,47	33,5	35,5	42,5	410	193	17,5	3,8	PMS2203470*##
2000	630	2400	0,56	33,5	35,5	42,5	410	230	18,5	3,4	PMS2203560*##
2000	630	2400	0,68	33	45	42,5	410	279	21,5	3	PMS2203680*##
2000	630	2400	0,82	33	45	42,5	410	336	22,5	2,7	PMS2203820*##
2000	630	2400	1	30	45	57,5	225	225	22	3,5	PMS2204100*##
2000	630	2400	1,5	35	50	57,5	225	337	26	2,8	PMS2204150*##
2500	700	3000	0,12	24,5	27,5	42,5	550	66	8,5	10,3	PMS2253120*##
2500	700	3000	0,15	24,5	27,5	42,5	550	82,5	9,5	8,5	PMS2253150*##
2500	700	3000	0,18	24,5	27,5	42,5	550	99	10,5	7,3	PMS2253180*##
2500	700	3000	0,22	33,5	35,5	42,5	550	121	14	6,1	PMS2253220*##
2500	700	3000	0,33	33,5	35,5	42,5	550	181	16	4,5	PMS2253330*##
2500	700	3000	0,39	33,5	35,5	42,5	550	214	17	4	PMS2253390*##
2500	700	3000	0,47	33	45	42,5	550	258	20	3,5	PMS2253470*##
2500	700	3000	0,56	33	45	42,5	550	308	21	3,1	PMS2253560*##
2500	700	3000	0,68	30	45	57,5	280	190	21	3,9	PMS2253680*##
2500	700	3000	1	35	50	57,5	280	280	25	3,1	PMS2254100*##

(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.

PMS

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)
3000	750	3500	0,068	24,5	27,5	42,5	750	51	7	14,8	PMS2302680*##
3000	750	3500	0,1	24,5	27,5	42,5	750	75	8,5	10,2	PMS2303100*##
3000	750	3500	0,12	33,5	35,5	42,5	750	90	11	8,9	PMS2303120*##
3000	750	3500	0,15	33,5	35,5	42,5	750	112	13	7,3	PMS2303150*##
3000	750	3500	0,18	33,5	35,5	42,5	750	135	13,5	6,3	PMS2303180*##
3000	750	3500	0,22	33	45	42,5	750	165	16,5	5,3	PMS2303220*##
3000	750	3500	0,3	33	45	42,5	750	225	18,5	4,2	PMS2303300*##
3000	750	3500	0,39	30	45	57,5	370	144	18,5	5,2	PMS2303390*##
3000	750	3500	0,47	35	50	57,5	370	174	21	4,6	PMS2303470*##
3000	750	3500	0,56	35	50	57,5	370	207	22	4,1	PMS2303560*##

(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