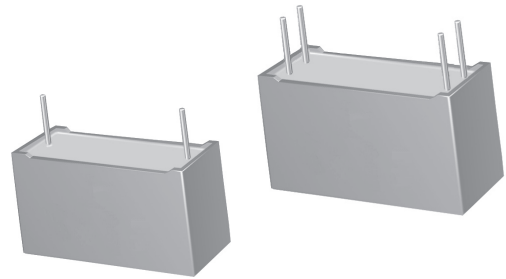


Metallized polypropylene film capacitor MKP - Snubber/pulse - High current Up to 6 x leads execution

Main applications: Snubber capacitor for energy conversion and control in power semiconductor circuits, resonant circuits, protection circuits in SMPSs, induction heaters, 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 wire. 2 x leads (S=5±1mm, L=25±5mm leads length), 4 x leads (SD=5,5±1,5mm) or 6 x leads (ST=5,5±1,5mm) execution		
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)	0,0047µF 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 capacitor and leads length used for connection		
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 x 10 ⁻⁴ , measured at 25±5°C)		
	Freq. 1kHz	Cr ≤ 1,0µF 4	Cr > 1,0µF 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

Resistance to soldering heat

300/10⁹ component hours

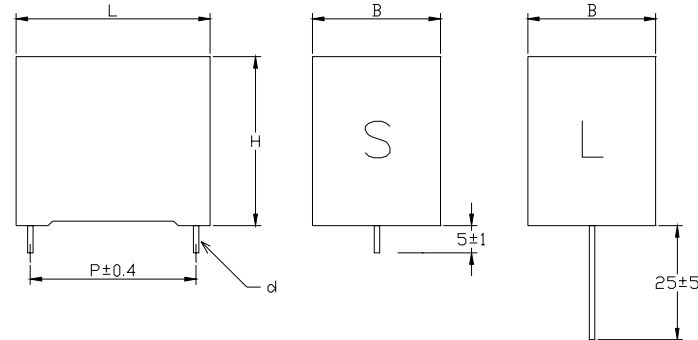
Test conditions:

Solder bath temperature= +260±5°C
Dipping time (with heat screen)= 10±1s

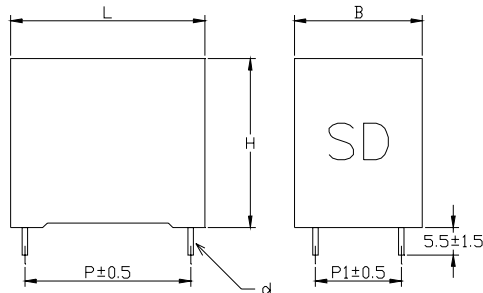
Performance:

Capacitance change ≤ ±1%
DF change ≤ 0,0010 at 1kHz
IR ≥ 50% of limit value

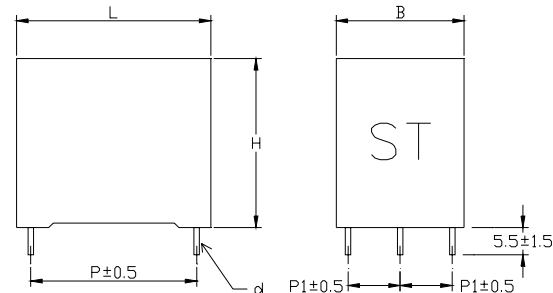
2 leads execution



4 leads execution



6 leads execution



PSB article table (different values available upon request)

Ur Vdc	Urms Vac ⁽⁴⁾	Upk Vdc	Cap. μF	Dimension in mm						du/dt V/μs	Ipeak A	Irms ⁽²⁾ A	ESR ⁽³⁾ mΩ	ICEL Code ⁽¹⁾
				B	H	L	d	P	P1					
700	380	1000	0,01	7	16	26,5	0,8	22,5	-	600	60	3,5	13	PSB1702100*G#
700	380	1000	0,15	10	18,5	26,5	0,8	22,5	-	600	90	5	9,3	PSB1703150*G#
700	380	1000	0,22	11	20	26,5	0,8	22,5	-	600	132	6,5	7	PSB1703220*G#
700	380	1000	0,22	11	20	32	0,8	27,5	-	485	107	6,5	7,8	PSB1703220*H#
700	380	1000	0,33	13	22	32	1	27,5	-	485	160	8,5	5,9	PSB1703330*H#
700	380	1000	0,47	15	24,5	32	1	27,5	-	485	228	9	4,6	PSB1703470*H#
700	380	1000	0,68	18	33	32	1,2	27,5	-	485	330	12	3,7	PSB1703680*H#
700	380	1000	0,68	18	33	32	1,2	27,5	5,1	485	330	16	3,1	PSB1703680*HSD
700	380	1000	1	22	37	32	1,2	27,5	-	485	485	12	3,2	PSB1704100*H#
700	380	1000	1	22	37	32	1,2	27,5	10,2	485	485	19	2,6	PSB1704100*HSD
700	380	1000	1	17	28	42,5	1,2	37,5	-	325	325	12	3,9	PSB1704100*J#
700	380	1000	1,5	22	30	42,5	1,2	37,5	-	325	487	12	3,4	PSB1704150*J#
700	380	1000	2	28	37	42,5	1,2	37,5	-	325	650	12	3,1	PSB1704200*J#
700	380	1000	2	28	37	42,5	1,2	37,5	10,2	325	650	22	2,5	PSB1704200*JSD
700	380	1000	2,2	28	37	42,5	1,2	37,5	-	325	715	12	3	PSB1704220*J#
700	380	1000	2,2	28	37	42,5	1,2	37,5	20,3	325	715	22	2,4	PSB1704220*JSD
700	380	1000	3	30	45	42,5	1,2	37,5	-	325	975	12	2,7	PSB1704300*J#
700	380	1000	3	30	45	42,5	1,2	37,5	20,3	325	975	22	2,1	PSB1704300*JSD
700	380	1000	3	30	45	42,5	1,2	37,5	10,2	325	975	26	2,1	PSB1704300*JST
700	380	1000	3,3	30	45	42,5	1,2	37,5	-	325	1070	12	2,6	PSB1704330*J#
700	380	1000	3,3	30	45	42,5	1,2	37,5	20,3	325	1070	22	2	PSB1704330*JSD
700	380	1000	3,3	30	45	42,5	1,2	37,5	10,2	325	1070	27	2	PSB1704330*JST
700	380	1000	4	30	45	57,5	1,2	52,5	-	200	800	12	3	PSB1704400*R#
700	380	1000	4	30	45	57,5	1,2	52,5	20,3	200	800	22	2,4	PSB1704400*RSD
700	380	1000	4	30	45	57,5	1,2	52,5	10,2	200	800	27	2,4	PSB1704400*RST

(1) Change the * symbol with the needed capacitance tolerance code: J=±5%, K=±10%, M=±20% and the # symbol with S for 5mm lead length and with L for 30 mm lead length - (2) Maximum values at 100kHz, +70°C - (3) Typical values at 100kHz

(4) Not suitable for across the line application.

Ur Vdc	Urms Vac ⁽⁴⁾	Upk Vdc	Cap. μ F	B	Dimension in mm					P1	du/dt V/ μ s	Ipeak A	Irms ⁽²⁾ A	ESR ⁽³⁾ m Ω	ICEL Code ⁽¹⁾
					H	L	d	P			A	A			
3000	750	3500	0,0047	7	16	26,5	0,8	22,5	-	3400	16	1,5	87	PSB2301470*G#	
3000	750	3500	0,0068	8,5	17	26,5	0,8	22,5	-	3400	23,1	2	64	PSB2301680*G#	
3000	750	3500	0,01	11	20	26,5	0,8	22,5	-	3400	34	2,5	45,7	PSB2302100*G#	
3000	750	3500	0,01	11	20	32	0,8	27,5	-	2750	27	2,5	54	PSB2302100*H#	
3000	750	3500	0,015	13	22	26,5	0,8	22,5	-	3400	51	3	33	PSB2302150*G#	
3000	750	3500	0,015	11	20	32	0,8	27,5	-	2750	41	3	38	PSB2302150*H#	
3000	750	3500	0,022	13	22	32	0,8	27,5	-	2750	60	4	26,5	PSB2302220*H#	
3000	750	3500	0,033	15	24,5	32	0,8	27,5	-	2750	91	5	19	PSB2302330*H#	
3000	750	3500	0,033	18	33	32	1,2	27,5	5,1	2750	91	7	18,3	PSB2302330*HSD	
3000	750	3500	0,047	18	33	32	1	27,5	-	2750	129	7,5	13,8	PSB2302470*H#	
3000	750	3500	0,047	18	33	32	1,2	27,5	10,2	2750	129	8,5	13,1	PSB2302470*HSD	
3000	750	3500	0,068	22	37	32	1,2	27,5	-	2750	187	9,5	10,5	PSB2302680*H#	
3000	750	3500	0,068	22	37	32	1,2	27,5	10,2	2750	187	11	9,8	PSB2302680*HSD	
3000	750	3500	0,068	17	28	42,5	1,2	37,5	-	1600	109	8	12,4	PSB2302680*J#	
3000	750	3500	0,1	22	30	42,5	1,2	37,5	-	1600	160	10	9,4	PSB2303100*J#	
3000	750	3500	0,1	28	37	42,5	1,2	37,5	10,2	1600	160	12,5	8,7	PSB2303100*JSD	
3000	750	3500	0,15	28	37	42,5	1,2	37,5	-	1600	240	12	6,8	PSB2303150*J#	
3000	750	3500	0,15	28	37	42,5	1,2	37,5	20,3	1600	240	14,5	6,1	PSB2303150*JSD	
3000	750	3500	0,22	30	45	42,5	1,2	37,5	-	1600	352	12	5,2	PSB2303220*J#	
3000	750	3500	0,22	30	45	42,5	1,2	37,5	20,3	1600	352	18,5	4,5	PSB2303220*JSD	
3000	750	3500	0,33	30	45	57,5	1,2	52,5	-	875	288	12	5,1	PSB2303330*R#	
3000	750	3500	0,33	30	45	57,5	1,2	52,5	20,3	875	288	20,5	4,4	PSB2303330*RSD	
3000	750	3500	0,47	35	50	57,5	1,2	52,5	-	875	411	12	4,5	PSB2303470*R#	
3000	750	3500	0,47	35	50	57,5	1,2	52,5	20,3	875	411	22	3,8	PSB2303470*RSD	

(1)Change the * symbol with the needed capacitance tolerance code: J=±5%, K=±10%, M=±20% and the # symbol with S for 5mm lead length and with L for 30 mm lead length - (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