



- Snubber Capacitor for Energy Conversion Power Semiconductor Circuits
- SMPS Protection Circuits
- IGBT Module Protection
- High Voltage
- High Current
- High Pulse Current Applications

Operating Temperature Range		-40°C to +85°C							
Capacitance Tolerance		+/- 10% at 1kHz, 20°C							
Rated Voltage	VDC	700	850	1000	1200	1500	2000	2500	3000
	SVDC	1000	1200	1400	1600	2000	2400	3000	3500
	VAC	380	450	480	500	575	630	700	750
Dissipation Factor (max) at 20°C.		Freq. (kHz)		C≤1uF			C>1μF		
		1		.04%			.06%		
Insulation Resistance @20°C(<70% RH) for 1 minute at 100VDC		>30,000MΩ x uF not to exceed 30,000MΩ							
Peak Current - I _{peak} (Non-repetitive)		I _{peak} = 1.5*C*dv/dt Maximum							
Dielectric Strength		200% of rated VDC for 10 seconds at 20°C between leads. 3KV at 60Hz for 60 seconds between leads and case.							
Self inductance		<1nH/mm of along the capacitor pitch.							
Capacitance drift		<1.0% up to 40°C after 2 years							
Temperature Coefficient		-200ppm/°C +/- 100ppm/°C							
Life Expectancy <small>Capacitance change (typical) -5%</small>		≥ 30,000 hours @VAC at 70°C ≥100,000 hours @VVDC at 70°C							
Failure rate		300/billion component hours							
Dielectric		Polypropylene							
Electrodes		Vacuum deposited metal layers							
Construction		Extended double metallized carrier fill with internal series connections and metallized film							
Leads		Tinned copper leads.							
Coating		Solvent resistant plastic box (UL 94V-1) with epoxy end fills (UL 94V-0)							

PHYSICAL DIMENSIONS

WVDC (VAC) μF	700 (380)	850 (450)	1000 (480)	1200 (500)	1500 (575)	2000 (630)	2500 (700)	3000 (750)
0.047								42.5x27.5x24.5
0.068								42.5x27.5x24.5
0.1						42.5x27.5x24.5	42.5x27.5x24.5	42.5x35.5x33.5
0.15						42.5x27.5x24.5	42.5x27.5x24.5	42.5x35.5x33.5
0.22						42.5x27.5x24.5	42.5x35.5x33.5	42.5x45x33
0.33				42.5x27.5x24.5	42.5x27.5x24.5	42.5x35.5x33.5	42.5x35.5x33.5	57.5x45x30
0.39				42.5x27.5x24.5	42.5x27.5x24.5	42.5x35.5x33.5		
0.47				42.5x27.5x24.5	42.5x35.5x33.5	42.5x45x33	42.5x45x33	57.5x50x35
0.56				42.5x27.5x24.5		42.5x45x33	57.5x45x30	
0.68			42.5x27.5x24.5	42.5x35.5x33.5	42.5x35.5x33.5	57.5x45x30	57.5x50x35	
0.75			42.5x27.5x24.5		42.5x35.5x33.5			
0.82		42.5x27.5x24.5		42.5x35.5x33.5		57.5x45x30	57.5x50x35	
1		42.5x27.5x24.5		42.5x35.5x33.5	42.5x45x33	57.5x50x35		
1.2	42.5x27.5x24.5		42.5x35.5x33.5	42.5x45x33	57.5x45x30	57.5x50x35		
1.5		42.5x35.5x33.5	42.5x35.5x33.5	42.5x45x33	57.5x50x35			
1.75		42.5x35.5x33.5	42.5x45x33					
1.8						57.5x50x35		
2	42.5x35.5x33.5	42.5x45x33	42.5x45x33	57.5x45x30				
2.2	42.5x35.5x33.5	42.5x45x33	57.5x45x30	57.5x50x35				
2.5	42.5x35.5x33.5	42.5x45x33		57.5x50x35				
3	42.5x45x33	57.5x45x30	57.5x50x35					
3.3	42.5x45x33	57.5x45x30	57.5x50x35					
3.5	42.5x45x33							
4	57.5x45x30	57.5x50x35						
4.7	57.5x50x35							
5	57.5x50x35							
5.6	57.5x50x35							

Convert to inches, divide by 25.4

L x H x T (mm)



STANDARD PART LISTING

Capacitance (µF)	WVDC	IC [®] PART NUMBER	dv/dt (v/µs)	Maximum RMS Current @100kHz, 70°C in Amps	Typical ESR @100 kHz, +25°C IN mΩ	Dimensions LxHxT (mm)
0.047	3000	473PMB302K#P2	1600	7.5	16.5	42.5x27.5x24.5
0.068	3000	683PMB302K#P2	1600	9	11.5	42.5x27.5x24.5
0.1	2000	104PMB202K#P2	1000	8	13	42.5x27.5x24.5
0.1	2500	104PMB252K#P2	1350	9	11.2	42.5x27.5x24.5
0.1	3000	104PMB302K#P1	1600	12	8.5	42.5x35.5x33.5
0.15	2000	154PMB202K#P2	1000	10.5	7.5	42.5x27.5x24.5
0.15	2500	154PMB252K#P2	1350	11	7.2	42.5x27.5x24.5
0.15	3000	154PMB302K#P1	1600	14.5	6.1	42.5x35.5x33.5
0.22	2000	224PMB202K#P2	1000	12	5.1	42.5x27.5x24.5
0.22	2500	224PMB252K#P1	1350	15	5.2	42.5x35.5x33.5
0.22	3000	224PMB302K#P0	1600	18	4.3	42.5x45x33
0.33	1200	334PMB122K#P2	650	12	5.1	42.5x27.5x24.5
0.33	1500	334PMB152K#P2	800	13.5	4.6	42.5x27.5x24.5
0.33	2000	334PMB202K#P1	1000	16.5	4.1	42.5x35.5x33.5
0.33	2500	334PMB252K#P1	1350	18	3.8	42.5x35.5x33.5
0.33	3000	334PMB302K#	875	20.5	4.3	57.5x45x30
0.39	1200	394PMB122K#P2	650	13	4.6	42.5x27.5x24.5
0.39	1500	394PMB152K#P2	800	14	4.3	42.5x27.5x24.5
0.39	2000	394PMB202K#P1	1000	17.5	3.6	42.5x35.5x33.5
0.47	1200	474PMB122K#P2	650	14	4.1	42.5x27.5x24.5
0.47	1500	474PMB152K#P1	800	18	3.7	42.5x35.5x33.5
0.47	2000	474PMB202K#P0	1000	20.5	3.2	42.5x45x33
0.47	2500	474PMB252K#P0	1350	22	3	42.5x45x33
0.47	3000	474PMB302K#	875	23	3.8	57.5x50x35
0.56	1200	564PMB122K#P2	650	14.5	3.7	42.5x27.5x24.5
0.56	2000	564PMB202K#P0	1000	21.5	3	42.5x45x33
0.56	2500	564PMB252K#	750	22.5	3.5	57.5x45x30
0.68	1000	684PMB102K#P2	500	15	3.3	42.5x27.5x24.5
0.68	1200	684PMB122K#P1	650	19	3.3	42.5x35.5x33.5
0.68	1500	684PMB152K#P1	800	19.5	3.1	42.5x35.5x33.5
0.68	2000	684PMB202K#	580	22.5	3.5	57.5x45x30
0.68	2500	684PMB252K#	750	25	3.2	57.5x50x35
0.75	1000	754PMB102K#P2	500	15.5	3.2	42.5x27.5x24.5
0.75	1500	754PMB152K#P1	800	20.5	2.8	42.5x35.5x33.5
0.82	850	824PMB850K#P2	400	15.5	3.1	42.5x27.5x24.5
0.82	1200	824PMB122K#P1	650	20	3	42.5x35.5x33.5
0.82	2000	824PMB202K#	580	24	3.1	57.5x45x30
0.82	2500	824PMB252K#	750	26	2.9	57.5x50x35
1	850	105PMB850K#P2	400	17.5	2.7	42.5x27.5x24.5

Capacitance (µF)	WVDC	IC [®] PART NUMBER	dv/dt (v/µs)	Maximum RMS Current @100kHz, 70°C in Amps	Typical ESR @100 kHz, +25°C IN mΩ	Dimensions LxHxT (mm)
1	1200	105PMB122K#P1	650	20.5	2.7	42.5x35.5x33.5
1	1500	105PMB152K#P0	800	23	2.5	42.5x45x33
1	2000	105PMB202K#	580	27	2.8	57.5x50x35
1.2	700	125PMB700K#P2	325	16.5	3.1	42.5x27.5x24.5
1.2	1000	125PMB102K#P1	500	22	2.5	42.5x35.5x33.5
1.2	1200	125PMB122K#P0	650	23.5	2.4	42.5x45x33
1.2	1500	125PMB152K#	500	25	2.8	57.5x45x30
1.2	2000	125PMB202K#	580	29	2.4	57.5x50x35
1.5	850	155PMB850K#P1	400	23	2.2	42.5x35.5x33.5
1.5	1000	155PMB102K#P1	500	23.5	2.2	42.5x35.5x33.5
1.5	1200	155PMB122K#P0	650	25	2.1	42.5x45x33
1.5	1500	155PMB152K#	500	28	2.5	57.5x50x35
1.75	850	175PMB850K#P1	400	23.5	2.2	42.5x35.5x33.5
1.75	1000	175PMB102K#P0	500	25.5	2.1	42.5x45x33
1.8	1500	185PMB152K#	500	29.5	2.3	57.5x50x35
2	700	205PMB700K#P1	325	22	2.5	42.5x35.5x33.5
2	850	205PMB850K#P0	400	26.5	2	42.5x45x33
2	1000	205PMB102K#P0	500	26.5	2	42.5x45x33
2	1200	205PMB122K#	350	27	2.4	57.5x45x30
2.2	700	225PMB700K#	325	22.5	2.4	42.5x35.5x33.5
2.2	850	225PMB850K#P0	400	27	2	42.5x45x33
2.2	1000	225PMB102K#	320	26.5	2.5	57.5x45x30
2.2	1200	225PMB122K#	350	30	2.3	57.5x50x35
2.5	700	255PMB700K#P1	325	23	2.2	42.5x35.5x33.5
2.5	850	255PMB850K#	400	28	1.9	42.5x45x33
2.5	1200	255PMB122K#	350	31	2.1	57.5x50x35
3	700	305PMB700K#P0	325	26	2.1	42.5x45x33
3	850	305PMB850K#	275	28.5	2.2	57.5x45x30
3	1000	305PMB102K#	320	31	2.1	57.5x50x35
3.3	700	335PMB700K#	325	26.5	2.1	42.5x45x33
3.3	850	335PMB850K#	275	29.5	2.1	57.5x45x30
3.3	1000	335PMB102K#	320	32	2	57.5x50x35
3.5	700	355PMB700K#P0	325	27	2	42.5x45x33
4	700	405PMB700K#	200	27	2.3	57.5x45x30
4	850	405PMB850K#	275	32	1.9	57.5x50x35
4.7	700	475PMB700K#	200	31	2.1	57.5x50x35
5	700	505PMB700K#	200	31	2.1	57.5x50x35
5.6	700	565PMB700K#	200	32	2	57.5x50x35

NOTE: Replace # in part number with lead style letter from Page 221

