



# Polypropylene Film Capacitors

Radial Leded for Power Semiconductor Circuits



## FEATURES

High Pulse Currents - High voltage

## APPLICATIONS

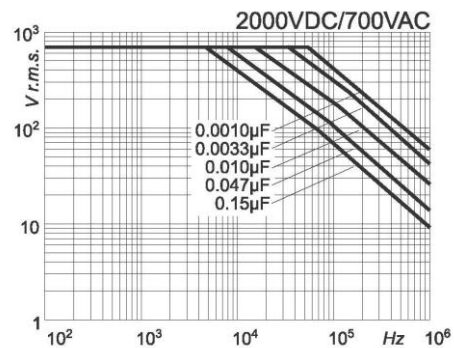
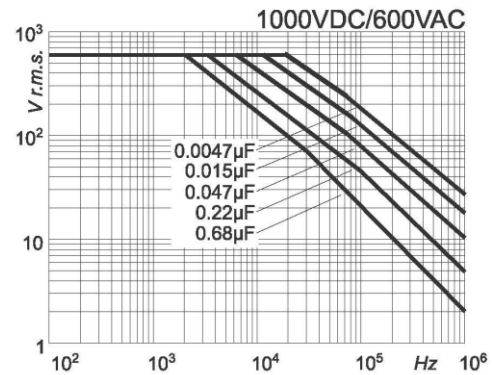
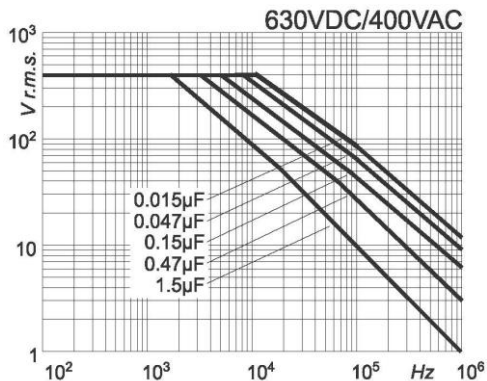
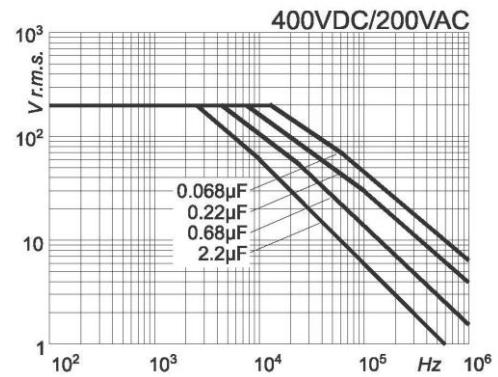
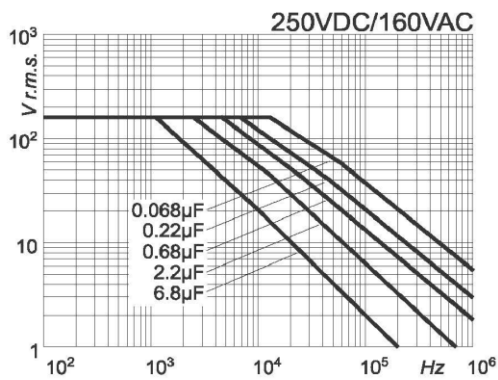
Power Semiconductor Circuits - SCR Commutation  
Ballast controls - Switching Power Supplies

<b>Operating Temperature Range</b>	<b>-55°C to +105°C</b>							
<b>Capacitance Tolerance</b>	±10% at 1 kHz, 25°C +5% optional							
<b>AC voltage (50/60 Hz)</b>	<b>WVDC</b>	<b>250</b>	<b>400</b>	<b>630</b>	<b>1000</b>	<b>1600</b>	<b>2000</b>	
	<b>VAC</b>	160	200	400	630	650	700	
For T>+85°C, The voltage (DC/AC) must be decreased by (1.5/2.25)% per °C								
<b>Dissipation Factor (MAX) 25°C</b>	<b>Frequency (kHz)</b>	<b>C&lt;0.1uF</b>		<b>0.1uF&lt;C&lt;1uF</b>		<b>C&gt;1uF</b>		
	<b>1</b>	0.05%		0.04%		0.05%		
	<b>10</b>	0.05%		0.06%		-		
	<b>100</b>	0.16%		-		-		
<b>Insulation Resistance @25°C (&lt;70% RH) for 1 minute at 100VDC applied</b>	<b>Capacitance</b>				<b>Insulation Resistance</b>			
	<b>&lt;0.33µF</b>				100000 MΩ			
	<b>&gt;0.33µF</b>				30000 MΩxµF			
<b>Self Inductance</b>	<1 nano-Henry per mm of lead spacing							
<b>Capacitance Drift Factor</b>	<0.5% after 2 years at 40°C							
<b>Load Life</b>	<b>2000 Hours, +85C with 125% of rated voltage</b>							
	<b>Capacitance Change</b>				≤1% of initially measured value			
	<b>Dissipation Factor</b>				≤0.001 at 10kHz and 25°C for C≤1uF ≤0.001 at 1kHz and 25°C for C>1uF			
	<b>Insulation Resistance</b>				≥50% of maximum specified value			
<b>Reliability (0.5xRated Voltage, 40°C) 1 FIT=1 failure/1 billion component hours</b>	2 Fit, VDC<400 WVDC 1 Fit, VDC>400 WVDC							
	<b>Capacitance Change</b>				≤10% of initially measured value			
	<b>Dissipation Factor</b>				≤200% of initially specified value			
	<b>Insulation Resistance</b>				≥50% of maximum specified value			
<b>Damp Heat test</b>	<b>56 days at 40°C with 90 to 95%RH, +40°C and no voltage applied</b>							
	<b>Capacitance Change</b>				≤5% of initially measured value			
	<b>Dissipation Factor</b>				≤0.005 at 1kHz and 25°C			
	<b>Insulation Resistance</b>				≥50% of maximum specified value			
<b>Self Inductance</b>	<1 nano-Henry per mm of lead spacing							
<b>Capacitance Drift Factor</b>	<0.5% after 2 years at 40°C							
<b>Capacitance Temperature Coefficient</b>	-200 ppm/°C, ±100ppm/°C							
<b>Dielectric Strength</b>	<b>Terminal to Terminal</b>				<b>Terminal to case</b>			
	160% of rated VDC or 150% VAC applied for 2 Seconds and 25°C				3kVAC @ 50/60 Hz applied between terminals and case for 60 seconds at 25°C			
<b>Dielectric Construction</b>	Polypropylene Metallized film							
<b>Coating</b>	Flame Retardant epoxy resin (UL94V0)							
<b>Leads</b>	Lead free tinned copper leads							



L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
d	0.8	0.8	0.8	1.2
LL	5.0±1.0	5.0±1.0	30±5.0	30±5.0

Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C  
Not for across the line applications



# PPB

## High Voltage Pulse Radial Lead Snubber

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
0.001	2000	102PPB202K	6200	26.5x15x6	22.5	0.8
0.001	2000	102PPB202KE	9000	18x11x5	15	0.8
0.0015	2000	152PPB202KE	9000	18x11x5	15	0.8
0.0022	1600	222PPB162K	7500	18x11x5	15	0.8
0.0022	2000	222PPB202KE	9000	18x12x6	15	0.8
0.0033	1000	332PPB102K	5500	18x11x5	15	0.8
0.0033	1600	332PPB162K	7500	18x12x6	15	0.8
0.0033	2000	332PPB202K	6200	26.5x15x6	22.5	0.8
0.0033	2000	332PPB202KB	9000	18x13.5x7.5	15	0.8
0.0047	630	472PPB630K	3300	18x11x5	15	0.8
0.0047	1000	472PPB102K	5500	18x11x5	15	0.8
0.0047	1600	472PPB162K	7500	18x13.5x7.5	15	0.8
0.0047	2000	472PPB202K	6200	26.5x15x6	22.5	0.8
0.0047	2000	472PPB202KB	9000	18x14.5x8.5	15	0.8
0.0068	630	682PPB630K	3300	18x11x5	15	0.8
0.0068	1000	682PPB102K	5500	18x11x5	15	0.8
0.0068	1600	682PPB162K	7500	18x14.5x8.5	15	0.8
0.0068	2000	682PPB202K	6200	26.5x15x6	22.5	0.8
0.0068	2000	682PPB202KB	9000	18x16x10	15	0.8
0.01	630	103PPB630K	3300	18x11x5	15	0.8
0.01	1000	103PPB102K	2500	26.5x15x6	22.5	0.8
0.01	1000	103PPB102KE	6200	18x12x6	15	0.8
0.01	1600	103PPB162KB	7500	18x16x10	15	0.8
0.01	1600	103PPB162K	3800	26.5x15x6	22.5	0.8
0.01	2000	103PPB202K	6200	26.5x17x8.5	22.5	0.8
0.015	630	153PPB630K	3300	18x11x5	15	0.8
0.015	1000	153PPB102K	2600	26.5x15x6	22.5	0.8
0.015	1000	153PPB102KB	5500	18x13.5x7.5	15	0.8
0.015	1600	153PPB162K	3800	26.5x16x7	22.5	0.8
0.015	2000	153PPB202K	6200	26.5x18.5x10	22.5	0.8
0.022	630	223PPB630K	3300	18x12x6	15	0.8
0.022	1000	223PPB102K	2600	26.5x15x6	22.5	0.8
0.022	1000	223PPB102KB	5500	18x14.5x8.5	15	0.8
0.022	1600	223PPB162K	3800	26.5x17x8.5	22.5	0.8
0.022	2000	223PPB202K	4200	32x20x11	27.5	0.8
0.022	2000	223PPB202KG	6200	26.5x22x13	22.5	0.8
0.033	400	333PPB400K	910	18x11x5	15	0.8
0.033	630	333PPB630K	3300	18x13.5x7.5	15	0.8
0.033	1000	333PPB102K	2600	26.5x16x7	22.5	0.8
0.033	1600	333PPB162K	3800	26.5x18.5x10	22.5	0.8
0.033	2000	333PPB202K	4200	32x22x13	27.5	0.8
0.047	250	473PPB250K	560	18x11x5	15	0.8
0.047	400	473PPB400K	910	18x12x6	15	0.8
0.047	630	473PPB630K	2050	26.5x15x6	22.5	0.8
0.047	630	473PPB630KB	3300	18x16x10	15	0.8
0.047	1000	473PPB102K	2600	26.5x17x8.5	22.5	0.8
0.047	1600	473PPB162K	2700	32x20x11	27.5	0.8
0.047	1600	473PPB162KG	3800	26.5x22x13	22.5	0.8
0.047	2000	473PPB202K	4200	32x24.5x15	27.5	0.8
0.068	250	683PPB250K	560	18x12x6	15	0.8
0.068	400	683PPB400K	910	18x13.5x7.5	15	0.8
0.068	630	683PPB630K	2050	26.5x16x7	22.5	0.8
0.068	1000	683PPB102K	2600	26.5x18.5x10	22.5	0.8
0.068	1600	683PPB162K	2700	32x22x13	27.5	0.8
0.068	2000	683PPB202K	4200	32x28x14	27.5	0.8
0.1	250	104PPB250K	560	18x13.5x7.5	15	0.8
0.1	400	104PPB400K	910	18x14.5x8.5	15	0.8

Capacitance (µF)	WVDC	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
0.1	630	104PPB630K	2050	26.5x17x8.5	22.5	0.8
0.1	1000	104PPB102K	1850	32x20x11	27.5	0.8
0.1	1000	104PPB102KG	2600	26.5x22x13	22.5	0.8
0.1	1600	104PPB162K	2700	32x28x14	27.5	0.8
0.1	2000	104PPB202K	2600	42.5x28x17	37.5	1
0.1	2000	104PPB202KB	4200	32x33x18	27.5	1
0.15	250	154PPB250K	560	18x14.5x8.5	15	0.8
0.15	400	154PPB400K	520	26.5x16x7	22.5	0.8
0.15	400	154PPB400KE	910	18x16x10	15	0.8
0.15	630	154PPB630KG	1500	26.5x20x11	22.5	0.8
0.15	630	154PPB630K	1500	32x20x11	27.5	0.8
0.15	1000	154PPB102K	1850	32x22x13	27.5	0.8
0.15	1600	154PPB162K	1700	42.5x28x17	37.5	1
0.15	1600	154PPB162KB	2700	32x33x18	27.5	1
0.15	2000	154PPB202K	2600	42.5x30x22	37.5	1
0.22	250	224PPB250K	320	26.5x15x6	22.5	0.8
0.22	250	224PPB250KB	560	18x16x10	15	0.8
0.22	400	224PPB400K	520	26.5x18.5x10	22.5	0.8
0.22	630	224PPB630K	1500	32x22x13	27.5	0.8
0.22	1000	224PPB102K	1850	32x28x14	27.5	0.8
0.22	1600	224PPB162K	1700	42.5x28x17	37.5	1
0.22	2000	224PPB202K	2600	42.5x37x28	37.5	1
0.33	250	334PPB250K	320	26.5x17x8.5	22.5	0.8
0.33	400	334PPB400K	520	26.5x20x11	22.5	0.8
0.33	400	334PPB400KH	400	32x17x9	27.5	0.8
0.33	630	334PPB630K	1500	32x24.5x15	27.5	0.8
0.33	1000	334PPB102K	1200	42.5x28x17	37.5	1
0.33	1000	334PPB102KB	1850	32x33x18	27.5	1
0.33	1600	334PPB162K	1700	42.5x30x22	37.5	1
0.47	250	474PPB250K	320	26.5x18.5x10	22.5	0.8
0.47	400	474PPB400K	400	32x22x13	27.5	0.8
0.47	400	474PPB400KG	520	26.5x22x13	22.5	0.8
0.47	630	474PPB630KB	1500	32x33x18	27.5	1
0.47	630	474PPB630K	950	42.5x28x17	37.5	1
0.47	1000	474PPB102K	1200	42.5x30x22	37.5	1
0.47	1600	474PPB162K	1700	42.5x37x28	37.5	1
0.68	250	684PPB250K	240	32x20x11	27.5	0.8
0.68	250	684PPB250KB	320	26.5x20x11	22.5	0.8
0.68	400	684PPB400K	400	32x24.5x15	27.5	0.8
0.68	630	684PPB630K	950	42.5x28x17	37.5	1
0.68	1000	684PPB102K	1200	42.5x37x28	37.5	1
1	250	105PPB250K	240	32x20x11	27.5	0.8
1	250	105PPB250KG	320	26.5x22x13	22.5	0.8
1	400	105PPB400KB	400	32x33x18	27.5	1
1	400	105PPB400K	280	42.5x28x17	37.5	1
1	630	105PPB630K	950	42.5x30x22	37.5	1
1	1000	105PPB102K	1200	42.5x37x28	37.5	1
1.5	250	155PPB250K	240	32x24.5x15	27.5	0.8
1.5	400	155PPB400K	280	42.5x28x17	37.5	1
1.5	630	155PPB630K	950	42.5x37x28	37.5	1
2.2	250	225PPB250K	240	32x28x14	27.5	0.8
2.2	250	225PPB250KB	170	42.5x28x17	37.5	1
2.2	400	225PPB400K	280	42.5x30x22	37.5	1
3.3	250	335PPB250K	170	42.5x30x22	37.5	1
3.3	400	335PPB400K	280	42.5x37x28	37.5	1
4.7	250	475PPB250K	170	42.5x30x22	37.5	1
6.8	250	685PPB250K	170	42.5x37x28	37.5	1