PPB

Polypropylene Film Capacitors

Radial Leaded for Power Semiconductor Circuits

FEATURES	High Pulse Currents - High voltage
APPLICATIONS	Power Semiconductor Circuits – SCR Commutation Ballast controls – Switching Power Supplies

Operating Temperature Range	**-55°C to +105°C**							
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional							
AC voltage (50/60 Hz)	**WVDC**	**250**	**400**	**630**	**1000**	**1600**	**2000**	
	VAC	160	200	400	630	650	700	
	For T>+85°C , The voltage (DC/AC)must be decreased by (1.5/2.25)% per °C							
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.1uF**	**0.1uF<C≤1uF**	**C>1uF**				
	1	0.05%	0.04%	0.05%				
	10	0.05%	0.06%	-				
	100	0.16%	-	-				
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	**Capacitance**		**Insulation Resistance**					
	≤0.33µF		100000 MΩ					
	>0.33µF		30000 MΩxµF					
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Load Life	**2000 Hours, +85C with 125% of rated voltage**							
	Capacitance Change	≤1% of initially measured value						
	Dissipation Factor	≤0.001 at 10kHz and 25°C for C≤1uF ≤0.001 at 1kHz and 25°C for C>1uF						
	Insulation Resistance	≥50% of maximum specified value						
Reliability (0.5xRated Voltage, 40°C) 1 FIT=1 failure/1 billion component hours	2 Fit, VDC≤400 WVDC 1 Fit, VDC>400 WVDC							
	Capacitance Change	<10% of initially measured value						
	Dissipation Factor	≤200% of initially specified value						
	Insulation Resistance	≥50% of maximum specified value						
Damp Heat test	**56 days at40°C with 90 to 95%RH, +40°C and no voltage applied**							
	Capacitance Change	≤5% of initially measured value						
	Dissipation Factor	≤0.005 at 1kHz and 25°C						
	Insulation Resistance	≥50% of maximum specified value						
Self Inductance	<1 nano-Henry per mm of lead spacing							
Capacitance Drift Factor	<0.5% after 2 years at 40°C							
Capacitance Temperature Coefficient	-200 ppm/°C, ±100ppm/°C							
Dielectric Strength	**Terminal to Terminal**					**Terminal to case**		
	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		
Dielectric	Polypropylene							
Construction	Metallized film							
Plastic Case and Epoxy Resin	Flame Retardant materials (UL 94V-0)							
Leads	Lead free tinned copper leads							

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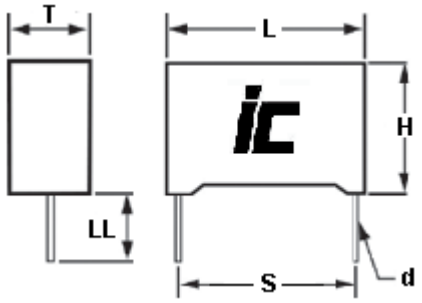
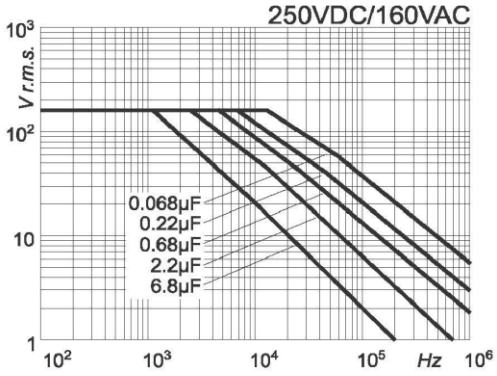
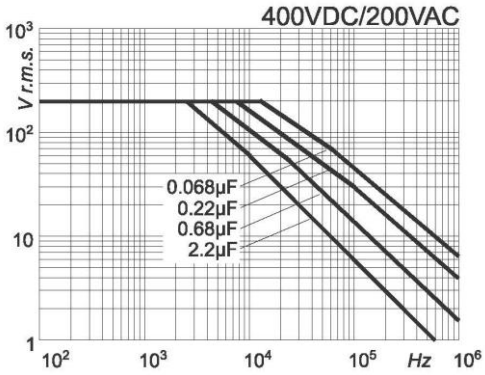
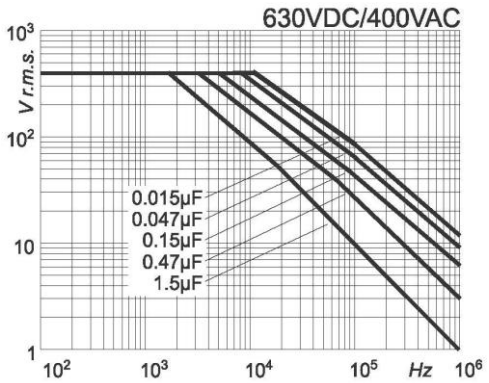


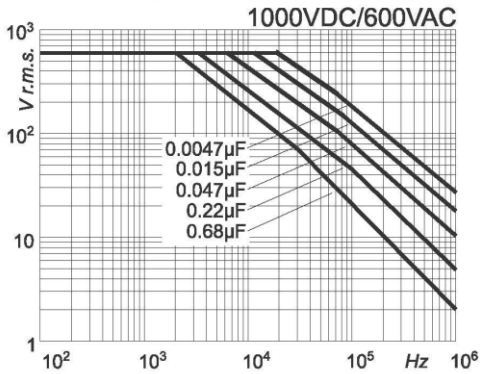
L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
d	0.8	0.8	0.8	1.2
LL	5.0±1.0	5.0±1.0	30±5.0	30±5.0

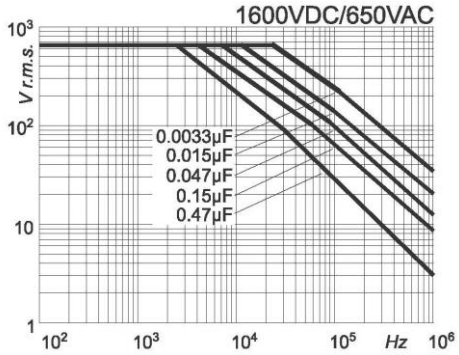
Permissible (sinusoidal) AC voltage versus frequency for a temperature rise of 10°C
Not for across the line applications

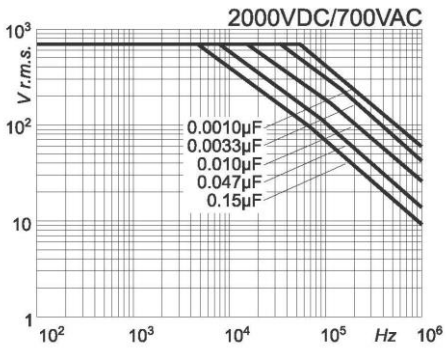












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High Voltage Pulse Radial Lead Snubber

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
250	0.047	473PPB250K	560	18x11x5	15	0.8
250	0.068	683PPB250K	560	18x12x6	15	0.8
250	0.1	104PPB250K	560	18x13.5x7.5	15	0.8
250	0.15	154PPB250K	560	18x14.5x8.5	15	0.8
250	0.22	224PPB250KB	560	18x16x10	15	0.8
250	0.22	224PPB250K	320	26.5x15x6	22.5	0.8
250	0.33	334PPB250K	320	26.5x17x8.5	22.5	0.8
250	0.47	474PPB250K	320	26.5x18.5x10	22.5	0.8
250	0.68	684PPB250KB	320	26.5x20x11	22.5	0.8
250	0.68	684PPB250K	240	32x20x11	27.5	0.8
250	1	105PPB250KG	320	26.5x22x13	22.5	0.8
250	1	105PPB250K	240	32x20x11	27.5	0.8
250	1.5	155PPB250K	240	32x24.5x15	27.5	0.8
250	2.2	225PPB250K	240	32x28x14	27.5	0.8
250	2.2	225PPB250KB	170	42.5x28x17	37.5	1
250	3.3	335PPB250K	170	42.5x30x22	37.5	1
250	4.7	475PPB250K	170	42.5x30x22	37.5	1
250	6.8	685PPB250K	170	42.5x37x28	37.5	1
400	0.033	333PPB400K	910	18x11x5	15	0.8
400	0.047	473PPB400K	910	18x12x6	15	0.8
400	0.068	683PPB400K	910	18x13.5x7.5	15	0.8
400	0.1	104PPB400K	910	18x14.5x8.5	15	0.8
400	0.15	154PPB400KE	910	18x16x10	15	0.8
400	0.15	154PPB400K	520	26.5x16x7	22.5	0.8
400	0.22	224PPB400K	520	26.5x18.5x10	22.5	0.8
400	0.33	334PPB400K	520	26.5x20x11	22.5	0.8
400	0.33	334PPB400KH	400	32x17x9	27.5	0.8
400	0.47	474PPB400KG	520	26.5x22x13	22.5	0.8
400	0.47	474PPB400K	400	32x22x13	27.5	0.8
400	0.68	684PPB400K	400	32x24.5x15	27.5	0.8
400	1	105PPB400KB	400	32x33x18	27.5	1
400	1	105PPB400K	280	42.5x28x17	37.5	1
400	1.5	155PPB400K	280	42.5x28x17	37.5	1
400	2.2	225PPB400K	280	42.5x30x22	37.5	1
400	3.3	335PPB400K	280	42.5x37x28	37.5	1
630	0.0047	472PPB630K	3300	18x11x5	15	0.8
630	0.0068	682PPB630K	3300	18x11x5	15	0.8
630	0.01	103PPB630K	3300	18x11x5	15	0.8
630	0.015	153PPB630K	3300	18x11x5	15	0.8
630	0.022	223PPB630K	3300	18x12x6	15	0.8
630	0.033	333PPB630K	3300	18x13.5x7.5	15	0.8
630	0.047	473PPB630KB	3300	18x16x10	15	0.8
630	0.047	473PPB630K	2050	26.5x15x6	22.5	0.8
630	0.068	683PPB630K	2050	26.5x16x7	22.5	0.8
630	0.1	104PPB630K	2050	26.5x17x8.5	22.5	0.8
630	0.15	154PPB630KG	1500	26.5x20x11	22.5	0.8
630	0.15	154PPB630K	1500	32x20x11	27.5	0.8
630	0.22	224PPB630K	1500	32x22x13	27.5	0.8
630	0.33	334PPB630K	1500	32x24.5x15	27.5	0.8
630	0.47	474PPB630KB	1500	32x33x18	27.5	1
630	0.47	474PPB630K	950	42.5x28x17	37.5	1
630	0.68	684PPB630K	950	42.5x28x17	37.5	1
630	1	105PPB630K	950	42.5x30x22	37.5	1
630	1.5	155PPB630K	950	42.5x37x28	37.5	1
1000	0.0033	332PPB102K	5500	18x11x5	15	0.8
1000	0.0047	472PPB102K	5500	18x11x5	15	0.8
1000	0.0068	682PPB102K	5500	18x11x5	15	0.8

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1000	0.01	103PPB102KE	6200	18x12x6	15	0.8
1000	0.01	103PPB102K	2500	26.5x15x6	22.5	0.8
1000	0.015	153PPB102KB	5500	18x13.5x7.5	15	0.8
1000	0.015	153PPB102K	2600	26.5x15x6	22.5	0.8
1000	0.022	223PPB102KB	5500	18x14.5x8.5	15	0.8
1000	0.022	223PPB102K	2600	26.5x15x6	22.5	0.8
1000	0.033	333PPB102K	2600	26.5x16x7	22.5	0.8
1000	0.047	473PPB102K	2600	26.5x17x8.5	22.5	0.8
1000	0.068	683PPB102K	2600	26.5x18.5x10	22.5	0.8
1000	0.1	104PPB102KG	2600	26.5x22x13	22.5	0.8
1000	0.1	104PPB102K	1850	32x20x11	27.5	0.8
1000	0.15	154PPB102K	1850	32x22x13	27.5	0.8
1000	0.22	224PPB102K	1850	32x28x14	27.5	0.8
1000	0.33	334PPB102KB	1850	32x33x18	27.5	1
1000	0.33	334PPB102K	1200	42.5x28x17	37.5	1
1000	0.47	474PPB102K	1200	42.5x30x22	37.5	1
1000	0.68	684PPB102K	1200	42.5x37x28	37.5	1
1000	1	105PPB102K	1200	42.5x37x28	37.5	1
1600	0.0022	222PPB162K	7500	18x11x5	15	0.8
1600	0.0033	332PPB162K	7500	18x12x6	15	0.8
1600	0.0047	472PPB162K	7500	18x13.5x7.5	15	0.8
1600	0.0068	682PPB162K	7500	18x14.5x8.5	15	0.8
1600	0.01	103PPB162KB	7500	18x16x10	15	0.8
1600	0.01	103PPB162K	3800	26.5x15x6	22.5	0.8
1600	0.015	153PPB162K	3800	26.5x16x7	22.5	0.8
1600	0.022	223PPB162K	3800	26.5x17x8.5	22.5	0.8
1600	0.033	333PPB162K	3800	26.5x18.5x10	22.5	0.8
1600	0.047	473PPB162KG	3800	26.5x22x13	22.5	0.8
1600	0.047	473PPB162K	2700	32x20x11	27.5	0.8
1600	0.068	683PPB162K	2700	32x22x13	27.5	0.8
1600	0.1	104PPB162K	2700	32x28x14	27.5	0.8
1600	0.15	154PPB162KB	2700	32x33x18	27.5	1
1600	0.15	154PPB162K	1700	42.5x28x17	37.5	1
1600	0.22	224PPB162K	1700	42.5x28x17	37.5	1
1600	0.33	334PPB162K	1700	42.5x30x22	37.5	1
1600	0.47	474PPB162K	1700	42.5x37x28	37.5	1
2000	0.001	102PPB202KE	9000	18x11x5	15	0.8
2000	0.001	102PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0015	152PPB202KE	9000	18x11x5	15	0.8
2000	0.0022	222PPB202KE	9000	18x12x6	15	0.8
2000	0.0033	332PPB202KB	9000	18x13.5x7.5	15	0.8
2000	0.0033	332PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0047	472PPB202KB	9000	18x14.5x8.5	15	0.8
2000	0.0047	472PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.0068	682PPB202KB	9000	18x16x10	15	0.8
2000	0.0068	682PPB202K	6200	26.5x15x6	22.5	0.8
2000	0.01	103PPB202K	6200	26.5x17x8.5	22.5	0.8
2000	0.015	153PPB202K	6200	26.5x18.5x10	22.5	0.8
2000	0.022	223PPB202KG	6200	26.5x22x13	22.5	0.8
2000	0.022	223PPB202K	4200	32x20x11	27.5	0.8
2000	0.033	333PPB202K	4200	32x22x13	27.5	0.8
2000	0.047	473PPB202K	4200	32x24.5x15	27.5	0.8
2000	0.068	683PPB202K	4200	32x28x14	27.5	0.8
2000	0.1	104PPB202KB	4200	32x33x18	27.5	1
2000	0.1	104PPB202K	2600	42.5x28x17	37.5	1
2000	0.15	154PPB202K	2600	42.5x30x22	37.5	1
2000	0.22	224PPB202K	2600	42.5x37x28	37.5	1

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