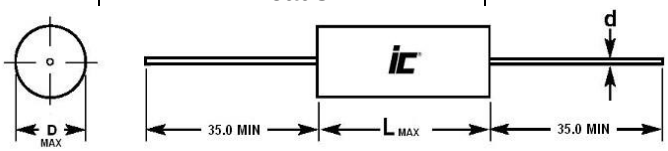
PPA

Polypropylene Film Capacitors

For Snubber, IGBT & Power Semiconductor Power Circuits

FEATURES	High dvdt – Good Pulse Current – Stable with Temperature and Frequency
APPLICATIONS	Inverters/Converters – Power Semiconductor Circuits – Induction Heating – Switching Power Supplies

Operating Temperature Range	**-55°C to +85°C**								
Capacitance Tolerance	±10% at 1 kHz, 25°C ±5% optional								
Surge Voltage(SVDC)	**WVDC**	**700**	**850**	**1000**	**1200**	**1500**	**2000**	**2500**	**3000**
	SVDC	1000	1200	1400	1600	2000	2400	3000	3500
AC voltage (50/60 Hz)	**WVDC**	**700**	**850**	**1000**	**1200**	**1500**	**2000**	**2500**	**3000**
	VAC	420	450	480	500	575	630	700	750
Dissipation Factor (MAX) 25°C	**Frequency (kHz)**	**C≤0.047uF**		**0.047>C≥1uF**		**C>1uF**			
	1	0.06%		0.05%		0.06%			
Insulation Resistance @25°C (<70% RH)for 1 minute at 100VDC applied	30000 MΩxμF (not to exceed 30GΩ)								
Self Inductance	<1 nano-Henry per mm of lead spacing								
Capacitance Drift Factor	<0.5% after 2 years at 40°C								
Life Expectancy	30000 hours @VAC, 70°C 100000 hours @VDC, 70°C								
	Capacitance Change	≤3% of initially measured value							
Failure Quota	300/ billion component hours								
Damp Heat test	**56 days at 40°C with 90 to 95%RH, +40°C and no voltage applied**								
	Capacitance Change	≤2% of initially measured value							
	Dissipation Factor	≤0.001 at 1kHz and 25°C							
	Insulation Resistance	≥50% of maximum specified value							
Self Inductance	<1 nano-Henry per mm of body length and lead length								
Capacitance Drift Factor	<1.0% 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 200% VDC applied for 2 Seconds and 25°C					3kVAC, 50/60Hz applied between the leads and case for 60 seconds			
Dielectric	Polypropylene								
Construction	Double Metallized film with internal series connections								
Coating	Flame Retardant polyester tape wrap (UL 501) with epoxy resin end fill(UL94V0)								
Leads	Lead free tinned copper leads								



L MAX	29	34	34	46	46	55	59
D	≤17.5	≤18	>18	≤25	>25	all	all
d±0.05	0.8	0.8	1.0	1.0	1.2	1.2	1.2

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High Voltage, High dvdt Axial Lead

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
700	0.1	104PPA700KG	950	3.5	13	12x29
700	0.15	154PPA700KG	950	4.5	9.4	13.5x29
700	0.22	224PPA700KG	950	6	7.1	15.5x29
700	0.22	224PPA700KJ	700	5.5	8	13.5x34
700	0.33	334PPA700KG	950	7	5.4	17.5x29
700	0.33	334PPA700K	700	7	6	15.5x34
700	0.47	474PPA700K	700	8	4.7	18x34
700	0.68	684PPA700KD22	700	10.5	3.9	21.5x34
700	0.68	684PPA700K	475	10	4.4	18x46
700	1	105PPA700KD26	700	12.5	3.2	26x34
700	1	105PPA700K	475	10.5	3.9	21x46
700	1.5	155PPA700K	475	14	3.3	25.5x46
700	2	205PPA700KN	475	14	3	29x46
700	2.2	225PPA700K	475	14	2.9	30x46
700	2.2	225PPA700KD27	350	14	3.8	27x55
700	2.2	225PPA700KS	300	14	4.2	25.5x59
700	2.5	255PPA700KN	475	14	2.8	32x46
700	2.5	255PPA700KR	350	14	3.5	29x55
700	2.5	255PPA700KS	300	14	3.9	27.5x59
700	3	305PPA700KN	475	14	2.6	35x46
700	3	305PPA700KR	350	14	3.2	31x55
700	3	305PPA700KS	300	14	3.6	29.5x59
700	3.3	335PPA700K	475	14	2.5	36x46
700	3.3	335PPA700KD32	350	14	3.1	32x55
700	3.3	335PPA700KS	300	14	3.5	30.5x59
700	4	405PPA700KR	350	14	2.8	34.5x59
700	4	405PPA700KS	300	14	3.1	33x59
700	4.7	475PPA700K	350	14	2.6	37.5x55
700	4.7	475PPA700KS	300	14	2.9	35.5x59
700	5.6	565PPA700K	350	14	2.3	41x55
700	5.6	565PPA700KS	300	14	2.6	38.5x59
700	6.8	685PPA700KS	300	14	2.4	42x59
850	0.068	683PPA850KG	1200	3.5	13.9	11.5x29
850	0.1	104PPA850K	1200	4.5	10.4	13x29
850	0.1	104PPA850KD11	900	4	11.5	11x34
850	0.15	154PPA850KD15	1200	5.5	7.6	15x29
850	0.15	154PPA850K	900	5	8.6	13x34
850	0.22	224PPA850KG	1200	7	6.1	17.5x29
850	0.22	224PPA850K	900	6.5	6.6	15x34
850	0.33	334PPA850K	900	8.5	4.8	18x34
850	0.47	474PPA850K	900	10.5	4	21.5x34
850	0.47	474PPA850KD18	600	9.5	5	18x46
850	0.68	684PPA850KD26	900	10.5	3.2	25.5x34
850	0.68	684PPA850K	600	10.5	4.1	21x46
850	1	105PPA850K	600	14	3.3	25x46
850	1.5	155PPA850K	600	14	2.8	29.5x46
850	2	205PPA850KD34	600	14	2.4	33.5x46
850	2	205PPA850K	425	14	3	29x55
850	2	205PPA850KS	275	14	3.4	28x59
850	2.2	225PPA850KD35	600	14	2.3	35x46
850	2.2	225PPA850K	425	14	2.8	30.5x55
850	2.2	225PPA850KS	375	14	3.2	29.5x59
850	2.5	255PPA850KN	600	14	2.6	36.5x46
850	2.5	255PPA850K	425	14	2.2	32x55
850	2.5	255PPA850KS	375	14	2.5	31x59
850	3	305PPA850KR	425	14	2.5	36x55
850	3	305PPA850KS	375	14	2.8	34x59
850	3.3	335PPA850K	425	14	2.4	37x55

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
850	3.3	335PPA850KS	375	14	2.7	35x59
850	4	405PPA850KR	425	14	2.3	40.5x55
850	4	405PPA850KS	375	14	2.6	38.5x59
850	4.7	475PPA850KS	375	14	2.4	41.5x59
1000	0.068	683PPA102KG	1400	3.5	13.6	12.5x29
1000	0.1	104PPA102KG	1400	4.5	10.2	14.5x29
1000	0.1	104PPA102KJ	1050	4.5	11	12.5x34
1000	0.15	154PPA102KG	1400	6	7.3	17x29
1000	0.15	154PPA102K	1050	6	8.2	14.5x34
1000	0.22	224PPA102K	1050	7.5	5.9	17.5x34
1000	0.33	334PPA102K	1050	9.5	4.5	20.5x34
1000	0.33	334PPA102KD17	680	9	5.9	17x46
1000	0.47	474PPA102K	1050	10.5	3.8	24x34
1000	0.47	474PPA102KD20	680	10.5	4.7	20x46
1000	0.68	684PPA102K	680	10.5	4	23.5x46
1000	1	105PPA102K	680	14	3.2	28x46
1000	1.5	155PPA102KD34	680	14	2.6	33.5x46
1000	1.5	155PPA102K	475	14	3.2	29.5x55
1000	1.5	155PPA102KS	425	14	3.6	28x59
1000	2	205PPA102KR	475	14	2.9	33.5x55
1000	2	205PPA102KS	425	14	3.2	31.5x59
1000	2.2	225PPA102K	475	14	2.7	35x55
1000	2.2	225PPA102KS	425	14	3	33x59
1000	3	305PPA102KR	475	14	2.4	40.5x55
1000	3	305PPA102KS	425	14	2.6	38x59
1000	3.3	335PPA102KS	425	14	2.5	40x59
1200	0.047	473PPA122K	1600	3	17	12x29
1200	0.047	473PPA122KD11	1200	3	19	10.5x34
1200	0.068	683PPA122K	1600	4	12.8	13.5x29
1200	0.068	683PPA122KD12	1200	3.5	14.3	12x34
1200	0.1	104PPA122KG	1600	5	9.7	16x29
1200	0.1	104PPA122K	1200	5	10.7	14x34
1200	0.15	154PPA122K	1200	6.5	7.7	17x34
1200	0.15	154PPA122KD14	780	6	10	14x46
1200	0.22	224PPA122K	1200	9	5.4	19.5x34
1200	0.22	224PPA122KD16	780	9	7.6	16x46
1200	0.33	334PPA122KD23	1200	10.5	4.5	23x34
1200	0.33	334PPA122K	780	9.5	5.4	19x46
1200	0.47	474PPA122K	780	10.5	4.8	22x46
1200	0.68	684PPA122K	780	13.5	3.9	26.5x46
1200	1	105PPA122K	780	14	3.4	32x46
1200	1	105PPA122KR	550	14	4	27x55
1200	1	105PPA122KS	350	14	4.5	25.5x59
1200	1.2	125PPA122KD35	780	14	3	34.5x46
1200	1.2	125PPA122K	550	14	3.4	29.5x55
1200	1.2	125PPA122KS	500	14	3.8	28x59
1200	1.5	155PPA122KD37	780	14	2.7	37x46
1200	1.5	155PPA122K	550	14	3	33x55
1200	1.5	155PPA122KS	500	14	3.4	31x59
1200	2	205PPA122KR	550	14	2.6	37.5x55
1200	2	205PPA122K	400	12	2.6	39x55
1200	2	205PPA122KS	500	14	2.9	35.5x59
1200	2.2	225PPA122K	550	14	2.5	39x55
1200	2.2	225PPA122KS	500	14	2.8	37x59
1200	2.5	255PPA122KR	550	14	2.3	41x55
1200	2.5	255PPA122KS	500	14	2.6	39x59
1200	3	305PPA122KS	500	14	2.4	42x59
1500	0.033	333PPA152KG	2000	3	22	12.5x29

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WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
1500	0.047	473PPA152KG	2000	3.5	16.5	14x29
1500	0.068	683PPA152KG	2000	4.5	12.4	16x29
1500	0.068	683PPA152K	1500	4	13.8	13.5x34
1500	0.1	104PPA152K	1500	5.5	9.6	16x34
1500	0.15	154PPA152K	1500	7	7.2	19.5x34
1500	0.22	224PPA152K	1500	9.5	5.3	23x34
1500	0.22	224PPA152KD19	980	9	7	19x46
1500	0.33	334PPA152K	980	10.5	5.3	23x46
1500	0.47	474PPA152K	980	13.5	4.3	27x46
1500	0.68	684PPA152K	980	14	3.7	31.5x46
1500	1	105PPA152KD37	980	14	3.2	37x46
1500	1	105PPA152K	675	14	3.7	31.5x55
1500	1	105PPA152KS	625	14	4.2	30.5x59
1500	1.2	125PPA152K	675	14	3.4	35.5x55
1500	1.2	125PPA152KS	625	14	3.7	33.5x59
1500	1.5	155PPA152K	675	14	2.9	40x55
1500	1.5	155PPA152KS	625	14	3.2	37x59
1500	2	205PPA152KS	625	14	2.8	42x59
2000	0.015	153PPA202KG	2750	2	37.5	11x29
2000	0.022	223PPA202KG	2750	2.5	27.5	12.5x29
2000	0.022	223PPA202K	2000	2.5	33.5	11x34
2000	0.033	333PPA202KG	2750	3.5	20.7	14.5x29
2000	0.033	333PPA202K	2000	3.5	23.8	13x34
2000	0.047	473PPA202KG	2750	4.5	15	16.5x29
2000	0.047	473PPA202K	2000	4.5	16.8	13x34
2000	0.068	683PPA202K	2000	5.5	11.8	17x34
2000	0.1	104PPA202K	2000	7.5	8.4	20x34
2000	0.15	154PPA202KD24	2000	9	6.6	24x34
2000	0.15	154PPA202K	1250	9	8.3	19.5x46
2000	0.22	224PPA202K	1250	10	6	23x46
2000	0.33	334PPA202K	1250	12.5	4.7	27.5x46
2000	0.47	474PPA202K	1250	14	3.9	32.5x46
2000	0.47	474PPA202KR	875	13	5.4	27x55
2000	0.47	474PPA202KS	800	12.5	6	26x59
2000	0.56	564PPA202KD35	1250	14	3.6	35x46
2000	0.56	564PPA202K	875	14	4.5	29.5x55
2000	0.56	564PPA202KS	800	14	5	28.5x59
2000	0.68	684PPA202K	875	14	4	32x55
2000	0.68	684PPA202KS	800	14	4.5	31x59
2000	1	105PPA202K	875	14	3.3	39x55
2000	1	105PPA202KS	800	14	3.7	37x59
2000	1.2	125PPA202KS	800	14	3.4	40.5x59
2500	0.01	103PPA252KG	3900	1.5	52	11.5x29

WVDC	Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
2500	0.015	153PPA252KG	2650	2.5	37	13.5x29
2500	0.022	223PPA252KG	3900	3	27	15.5x29
2500	0.022	223PPA252KJ	2600	2.5	31	13x34
2500	0.033	333PPA252KG	3900	4	20	18x29
2500	0.033	333PPA252K	2600	4	23	15x34
2500	0.047	473PPA252K	2600	5	16.5	17x34
2500	0.068	683PPA252K	2600	6.5	11.5	20.5x34
2500	0.1	104PPA252K	2600	8.5	8	24.5x34
2500	0.1	104PPA252KD20	1650	8	11.5	19.5x46
2500	0.15	154PPA252K	1650	9	8	23.5x46
2500	0.22	224PPA252K	1650	11.5	5.9	27.5x46
2500	0.33	334PPA252K	1650	14	4.5	33.5x46
2500	0.33	334PPA252KD29	1050	13.5	5.4	28.5x55
2500	0.33	334PPA252KS	925	13	6	27.5x59
2500	0.47	474PPA252K	1050	14	4.4	33.5x55
2500	0.47	474PPA252KS	925	14	4.9	32x59
2500	0.56	564PPA252K	1050	14	4	36.5x55
2500	0.56	564PPA252KS	925	14	4.5	34.5x59
2500	0.68	684PPA252K	1050	14	3.7	40x55
2500	0.68	684PPA252KS	925	14	4.1	38x59
2500	0.82	824PPA252KS	925	14	3.8	41.5x59
3000	0.0047	472PPA302KG	5250	1	88	11x29
3000	0.0068	682PPA302KG	5250	1.5	65	12.5x29
3000	0.0068	682PPA302K	3500	1.5	77	10.5x34
3000	0.01	103PPA302KG	5250	2	46	14.5x29
3000	0.01	103PPA302K	3500	2	54.5	12x34
3000	0.015	153PPA302KG	5250	3	33.5	16.5x29
3000	0.015	153PPA302K	3500	3	38.5	14x34
3000	0.022	223PPA302K	3500	4	27	16x34
3000	0.033	333PPA302K	3500	5	19	19x34
3000	0.047	473PPA302KD23	3500	6.5	14	22.5x34
3000	0.047	473PPA302K	2000	6	17.8	18x46
3000	0.068	683PPA302K	2000	8	12.8	21x46
3000	0.1	104PPA302K	2000	11	9.4	25x46
3000	0.15	154PPA302K	2000	12	6.8	30x46
3000	0.22	224PPA302K	2000	14	5.2	36x46
3000	0.22	224PPA302KD31	1450	14	5.9	30.5x55
3000	0.22	224PPA302KS	1275	14	6.5	29x59
3000	0.33	334PPA302K	1450	14	4.9	37x55
3000	0.33	334PPA302KS	1275	14	5.4	35x59
3000	0.39	394PPA302K	1450	14	4.4	40x55
3000	0.39	394PPA302KS	1275	14	4.9	37.5x59
3000	0.47	474PPA302KS	1275	14	4.5	41x59

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