

# BPA

## +85°C Non-Polar Axial Lead Aluminum Electrolytic Capacitors



For all applications with unknown/reversing polarity

### FEATURES

- Audio Coupling
- Crossover Networks

- Capacitance range: .47  $\mu$ F to 1000  $\mu$ F
- Voltage range: 16 WVDC to 100 WVDC

### SPECIFICATIONS

Capacitance Tolerance		$\pm 20\%$ at 120Hz, 25°C														
Operating Temperature Range		-40°C to +85°C														
Dissipation Factor 120Hz, 25°C	WVDC	16	25	50	100											
	$\tan \delta$	.22	.20	.14	.1											
Leakage Current	WVDC	100 WVDC														
	Time	5 minutes														
		< .05 CV or 3 $\mu$ A whichever is greater														
Impedance Ratio 120Hz	WVDC	16	25	50	100											
	-25°C/20°C	2	2	2	2											
	-40°C/20°C	6	5	4	3											
Long Life	2,000 hours at +85°C with rated voltage reversing polarity every 250 hours															
	Capacitance change Dissipation factor Leakage current											< 20% of initial measured value <200% of initial specified value <Initial specified value				
Shelf Life	1000 hours at + 85°C with no voltage applied. Units will meet load life specification															
Ripple Current Multipliers		Frequency (Hz)						Temperature (°C)								
	Capacitance ( $\mu$ F)	50	120	400	1K	10K	100K	+85	+70	+60	+45					
	$C \leq 10$	.72	1.0	1.25	1.45	1.65	1.7	1.0	1.3	1.5	1.8					
	$10 < C \leq 100$	.75	1.0	1.19	1.36	1.53	1.57	1.0	1.3	1.5	1.8					
	$100 < C \leq 1000$	.79	1.0	1.15	1.30	1.45	1.49	1.0	1.3	1.5	1.8					

Aluminum Electrolytic

### SPECIAL ORDER OPTIONS

(See Pages 33 thru 37)

- Special tolerances:  $\pm 10\%$  (K), -10% + 30% (Q)
- Tape and Reel
- Polyester Sleeve
- Epoxy end seal



ILLINOIS CAPACITOR, INC. 3757 W. Touhy Ave., Lincolnwood, IL 60712 • (847) 675-1760 • Fax (847) 673-2850 • www.illcap.com

## STANDARD PART LISTING

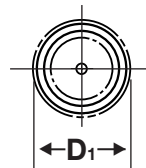
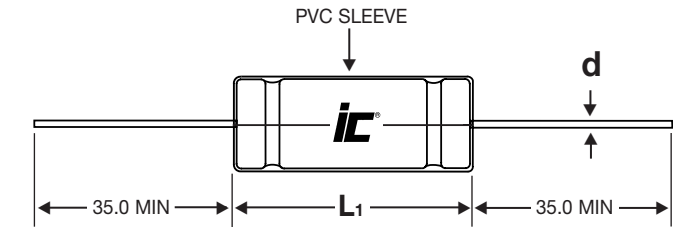
Capacitance (μF)	WVDC	IC <sup>®</sup> PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (mA) 120Hz, +85°C	Dimension D x L (mm)
0.47	50	474BPA050M	493.832	13	6x16
1	50	105BPA050M	232.101	19	6x16
1	100	105BPA100M	165.786	25	6x16
2.2	50	225BPA050M	105.500	30	6x16
2.2	100	225BPA100M	75.357	36	6x16
3.3	50	335BPA050M	70.334	37	6x16
3.3	100	335BPA100M	50.238	46	6x16
4.7	50	475BPA050M	49.383	46	6x16
4.7	100	475BPA100M	35.274	55	6x16
10	50	106BPA050M	23.210	68	6x16
10	100	106BPA100M	16.579	92	8x19
15	25	156BPA025M	22.105	73	6x16
15	50	156BPA050M	15.473	98	8x16
22	25	226BPA025M	15.071	88	6x16
22	50	226BPA050M	10.550	120	8x16
22	100	226BPA100M	7.536	155	10x19
33	25	336BPA025M	10.048	120	8x16
33	50	336BPA050M	7.033	145	8x19
33	100	336BPA100M	5.024	210	10x24
47	16	476BPA016M	7.760	110	6x16
47	25	476BPA025M	7.055	140	8x16

Capacitance (μF)	WVDC	IC <sup>®</sup> PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (mA) 120Hz, +85°C	Dimension D x L (mm)
47	50	476BPA050M	4.938	200	10x19
47	100	476BPA100M	3.527	285	12.5x27
68	16	686BPA016M	5.364	155	8x16
68	25	686BPA025M	4.876	204	10x19
68	50	686BPA050M	3.413	260	10x24
100	16	107BPA016M	3.647	175	8x19
100	25	107BPA025M	3.316	235	10x19
100	50	107BPA050M	2.321	325	10x24
100	100	107BPA100M	1.658	500	16x34
150	25	157BPA025M	2.210	320	10x19
220	16	227BPA016M	1.658	290	10x19
220	25	227BPA025M	1.507	390	10x24
220	50	227BPA050M	1.055	600	12.5x31
330	16	337BPA016M	1.105	450	10x24
330	25	337BPA025M	1.005	555	12.5x27
330	50	337BPA050M	0.703	730	16x34
470	16	477BPA016M	0.776	565	10x30
470	25	477BPA025M	0.705	665	12.5x31
470	50	477BPA050M	0.494	860	16x39
1000	16	108BPA016M	0.365	950	12.5x31

## PHYSICAL DIMENSIONS

WVDC (SV) μF	16 (20)	25 (32)	50 (63)	100 (125)
0.47			6x16	
1.0			6x16	6x16
2.2			6x16	6x16
3.3			6x16	6x16
4.7			6x16	6x16
10			6x16	8x19
15		6x16	8x16	
22		6x16	8x16	10x19
33		8x16	8x19	10x24
47	6x16	8x16	10x19	12.5x27
68	8x16	10x19	10x24	
100	8x19	10x19	10x24	16x34
150		10x19		
220	10x19	10x24	12.5x31	
330	10x24	12.5x27	16x34	
470	10x30	12.5x31	16x39	
1000	12.5x31			

DxL(mm)



LEAD INFORMATION VS. CASE DIAMETER

D	6.0	8.0	10.0	12.5	16.0
d	0.6	0.6	0.6	0.8	0.8

D<sub>1</sub> = D ± .5mm

L<sub>1</sub> = L + 2.0mm Max.