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 µF to 1000 µF*
- *Voltage range: 16 WVDC to 100 WVDC*

SPECIFICATIONS

Capacitance Tolerance		**±20% at 120Hz, 25°C**				
Operating Temperature Range		-40°C to +85°C				
Dissipation Factor 120Hz, 25°C	**WVDC**	**16**	**25**	**50**	**100**	
	tanδ	.22	.20	.14	.1	
Leakage Current	**WVDC**	**100 WVDC**				
	Time	**5 minutes**				
		< .05 CV or 3µA whichever is greater				
Impedance Ratio 120Hz	**WVDC**	**16**	**25**	**50**	**100**	
	-25°C/25°C	2	2	2	2	
	-40°C/25°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 (µF)	50	120	400	1K	10K	100K	+85	+70	+60	+45
C≤10	.72	1.0	1.25	1.45	1.65	1.7	1.0	1.3	1.5	1.8
10<C≤100	.75	1.0	1.19	1.36	1.53	1.57	1.0	1.3	1.5	1.8
100<C≤1000	.79	1.0	1.15	1.30	1.45	1.49	1.0	1.3	1.5	1.8

SPECIAL ORDER OPTIONS

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

ILLINOIS CAPACITOR, INC. 3757 W.Touhy Ave., Lincolnwood, Illinois 60645 • (847) 675-1760 • Fax (847) 673-2850

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STANDARD PART LISTING

Capacitance µF	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz,+25°C	Maximum Leakage Current(µA) @5min, +25°C	Maximum RMS Ripple Current (mA) 120Hz,+85°C
0.47	50	474BPA050M	493.8	3.0	13
1.0	50	105BPA050M	232.1	3.0	19
1.0	100	105BPA100M	165.6	3.0	25
2.2	50	225BPA050M	105.5	3.3	30
2.2	100	225BPA100M	75.36	6.6	36
3.3	50	335BPA050M	70.33	5.0	37
3.3	100	335BPA100M	50.24	9.9	46
4.7	50	475BPA050M	49.38	7.0	46
4.7	100	475BPA100M	35.27	14.1	55
10	50	106BPA050M	23.21	15.0	68
10	100	106BPA100M	16.58	30.0	92
15	25	156BPA025M	22.10	11.0	73
15	50	156BPA050M	15.47	22.5	98
22	25	226BPA025M	15.07	17.0	88
22	50	226BPA050M	10.55	33.0	120
22	100	226BPA100M	7.54	66.0	155
33	25	336BPA025M	10.05	25.0	120
33	50	336BPA050M	7.03	49.0	145
33	100	336BPA100M	5.02	99.0	210
47	16	476BPA016M	7.76	23.0	110
47	25	476BPA025M	7.05	35	140

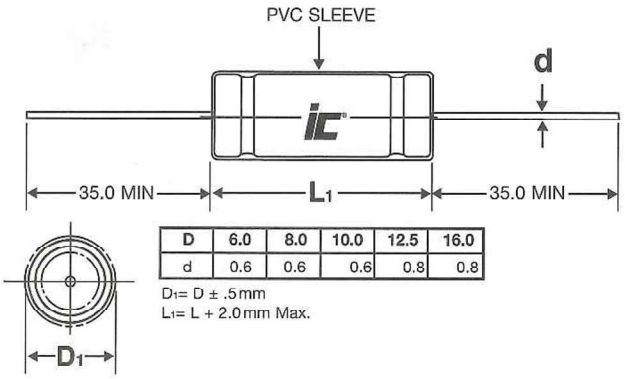
Capacitance µF	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz,+25°C	Maximum Leakage Current(µA) @5min,+25°C	Maximum RMS RippleCurrent (mA) 120Hz,+85°C
47	50	476BPA050M	4.94	70	200
47	100	476BPA100M	3.53	141	285
68	16	686BPA016M	5.36	33	155
68	25	686BPA025M	4.88	51	204
68	50	686BPA050M	3.41	102	260
100	16	107BPA016M	3.65	48	175
100	25	107BPA025M	3.32	75	235
100	50	107BPA050M	2.32	150	325
100	100	107BPA100M	1.66	300	500
150	25	157BPA025M	2.21	112	320
220	16	227BPA016M	1.66	106	290
220	25	227BPA025M	1.51	165	390
220	50	227BPA050M	1.06	330	600
330	16	337BPA016M	1.11	158	450
330	25	337BPA025M	1.0	247	555
330	50	337BPA050M	0.70	495	730
470	16	477BPA016M	0.78	226	565
470	25	477BPA025M	0.71	352	665
470	50	477BPA050M	0.49	705	960
1000	16	108BPA016M	0.36	480	950

NOTE 1: WVDC: MAXIMUM RATED DC WORKING VOLTAGE AT +85°C.
NOTE 2: SVDC: MAXIMUM RATED DC SURGE VOLTAGE AT +85°C.
NOTE 3: DISSIPATION FACTOR (TAN δ) MAXIMUM; 120 Hz, +25°C.
NOTE 4: ESR: MAXIMUM EQUIVALENT SERIES RESISTANCE; 120 Hz, +25°C MINIMUM CAPACITANCE, MAXIMUM DISSIPATION FACTOR.
NOTE 5: MAXIMUM LEAKAGE CURRENT; RATED WVDC, 5 MINUTES, +25°C.
NOTE 6: RMS RIPPLE CURRENT; 120 Hz, +85°C.
NOTE 7: CAPACITANCE TOLERANCE IS MEASURED AT 120 Hz, +25°C.
NOTE 8: ALL MEASUREMENTS ARE PERFORMED USING THE BRIDGE METHOD.

PHYSICAL DIMENSIONS

µF \ WVDC (SV)	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			

Convert to inches, divide by 25.4 DxL(mm)



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

$D_1 = D \pm .5$ mm
$L_1 = L + 2.0$ mm Max.

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