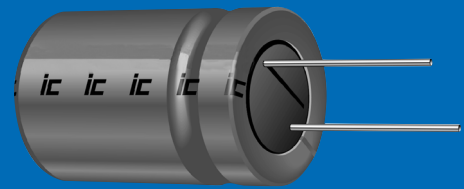


# BPS

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



For all applications with unknown/reversed polarity

### FEATURES

- Audio Coupling
- Crossover Networks
- Capacitance Range: .47  $\mu$ F to 4,700  $\mu$ F
- Voltage Range: 10 WVDC to 100 WVDC
- Solvent Tolerant End Seals Standard

### SPECIFICATIONS

Capacitance Tolerance		$\pm 20\%$ at 120Hz, 25°C												
Operating Temperature Range		-40°C to + 85°C												
Dissipation Factor 120Hz, 25°C	WVDC	10	16	25	35	50	63	100						
	$\tan \delta$	.24	.22	.20	.16	.14	.12	.10						
Impedance Ratio (Max.) @120Hz	WVDC	10	16	25	35	50	63	100						
	-25°C/25°C	3	2	2	2	2	2	2						
	-40°C/25°C	8	6	5	4	4	3	3						
Leakage Current	WVDC	$\leq 100$ WVDC												
	Time	5 minutes												
		.03 CV or 3 $\mu$ A whichever is greater												
Load Life	2,000 hours at +85°C, with rated WVDC reversing polarity every 250 hours													
	Capacitance change Dissipation factor Leakage current					$\leq 20\%$ of initial measured value $\leq 200\%$ of initial specified value $\leq$ initial specified value								
Shelf Life	1,000 hours at +85°C with no voltage applied. Units will meet load life specifications													
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			
$C > 1000$	.79	1.0	1.15	1.30	1.45	1.49	1.0	1.3	1.5	1.8				

### SPECIAL ORDER OPTIONS

(See pages 33 thru 37)

- Special tolerances:  $\pm 10\%$  (K), -10% + 30% (Q)
- Tape and Reel/Ammo-Pack
- Cut, Formed, Cut and Formed, and Snap In Leads
- Epoxy end seal
- Polyester sleeve



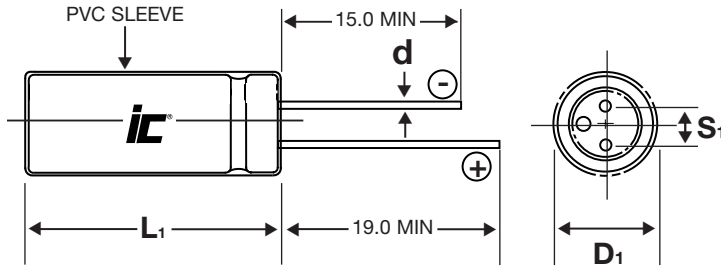
3757 W. Touhy Ave., Lincolnwood, IL 60712 • (847) 675-1760 • Fax (847) 673-2850 • www.illcap.com

## PHYSICAL DIMENSIONS

WVDC ( $\mu$ F)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
0.47					5x11		5x11
1					5x11		5x11
2.2					5x11		6.3x11
3.3					5x11		6.3x11
4.7					5x11	5x11	6.3x11
10				5x11	6.3x11	6.3x11	8x11.5
22	5x11	5x11		6.3x11	8x11.5	8x11.5	10x16
33	5x11	5x11	6.3x11		8x11.5	10x12.5	12.5x20
47	5x11	6.3x11	6.3x11	8x11.5	10x12.5	10x16	12.5x20
100	6.3x11	8x11.5	8x11.5	10x16	10x20	12.5x20	16x25
220	8x11.5	10x12.5	10x16	12.5x20	12.5x25	16x25	18x35.5
330	10x16	10x16		12.5x20	16x25	16x31.5	18x35.5
470	10x16	10x20	12.5x20	12.5x25	16x31.5	18x35.5	18x42
1000	12.5x20	12.5x25	16x25	16x31.5			
2200	16x25	16x31.5	18x35.5				
3300	16x31.5	18x35.5					
4700	18x35.5						

Convert to inches, divide by 25.4

DxL(mm)



NOTE: Case Vent is standard on all diameter  $\geq 8.0$ mm

LEAD INFORMATION VS. CASE DIAMETER

D	5.0	6.3	8.0	10.0	12.5	16.0	18.0
S	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
B	0.5	0.5	0.5	0.5	0.8	0.5	0.5

$L_1 = L + 2.0$  mm Max.

$D_1 = D + B$  Max.

$S_1 = S \pm 0.5$  mm Max.

## STANDARD PART LISTING

Capacitance (μF)	WVDC	ic PART NUMBER	Maximum ESR Ω 120Hz,+25°C	Maximum RMS Ripple Current (mA) 120Hz,+85°C	Dimensions DxL (mm)
0.47	50	474BPS050M	564.379	5	5x11
0.47	100	474BPS100M	352.737	10	5x11
1.0	50	105BPS050M	265.258	10	5x11
1.0	100	105BPS100M	165.786	18	5x11
2.2	50	225BPS050M	120.572	23	5x11
2.2	100	225BPS100M	75.357	30	6.3x11
3.3	50	335BPS050M	80.381	28	5x11
3.3	100	335BPS100M	50.238	35	6.3x11
4.7	50	475BPS050M	56.438	35	5x11
4.7	63	475BPS063M	42.328	37	5x11
4.7	100	475BPS100M	35.274	44	6.3x11
10	35	106BPS035M	23.210	46	5x11
10	50	106BPS050M	26.526	54	6.3x11
10	63	106BPS063M	19.894	58	6.3x11
10	100	106BPS100M	16.579	72	8x11.5
22	16	226BPS016M	16.579	60	5x11
22	35	226BPS035M	10.550	75	6.3x11
22	50	226BPS050M	12.057	90	8x11.5
22	63	226BPS063M	9.043	96	8x11.5
22	100	226BPS100M	7.536	138	10x16
33	16	336BPS016M	11.052	72	5x11
33	25	336BPS025M	10.048	82	6.3x11
33	50	336BPS050M	8.038	108	8x11.5
33	63	336BPS063M	6.029	135	10x12.5
33	100	336BPS100M	5.024	200	12.5x20
47	10	476BPS010M	8.466	82	5x11
47	25	476BPS025M	7.055	95	6.3x11
47	35	476BPS035M	4.938	120	8x11.5
47	50	476BPS050M	5.644	155	10x12.5
47	63	476BPS063M	4.233	185	10x16
47	100	476BPS100M	3.527	245	12.5x20
100	10	107BPS010M	3.979	125	6.3x11
100	25	107BPS025M	3.316	160	8x11.5

Capacitance (μF)	WVDC	ic PART NUMBER	Maximum ESR Ω 120Hz,+25°C	Maximum RMS Ripple Current (mA) 120Hz,+85°C	Dimensions DxL (mm)
100	35	107BPS035M	2.321	230	10x16
100	50	107BPS050M	2.653	270	10x20
100	63	107BPS063M	1.989	325	12.5x20
100	100	107BPS100M	1.658	430	16x25
220	10	227BPS010M	1.809	215	8x11.5
220	16	227BPS016M	1.658	263	10x12.5
220	25	227BPS025M	1.507	305	10x16
220	35	227BPS035M	1.055	418	12.5x20
220	50	227BPS050M	1.206	490	12.5x25
220	63	227BPS063M	0.904	575	16x25
220	100	227BPS100M	0.754	650	18x35.5
330	16	337BPS016M	1.105	358	10x16
330	35	337BPS035M	0.703	520	12.5x20
330	50	337BPS050M	0.804	660	16x25
330	63	337BPS063M	0.603	655	16x31.5
330	100	337BPS100M	0.502	790	18x35.5
470	10	477BPS010M	0.847	410	10x16
470	16	477BPS016M	0.776	465	10x20
470	25	477BPS025M	0.705	550	12.5x20
470	35	477BPS035M	0.494	665	12.5x25
470	50	477BPS050M	0.564	850	16x31.5
470	63	477BPS063M	0.423	965	18x35.5
470	100	477BPS100M	0.353	1030	18x42
1,000	10	108BPS010M	0.398	725	12.5x20
1,000	16	108BPS016M	0.365	825	12.5x25
1,000	25	108BPS025M	0.332	965	16x25
1,000	35	108BPS035M	0.232	1160	16x31.5
2200	10	228BPS010M	0.211	1280	16x25
2200	16	228BPS016M	0.196	1460	16x31.5
2200	25	228BPS025M	0.181	1620	18x35.5
3300	10	338BPS010M	0.151	1590	16x31.5
3300	16	338BPS016M	0.141	1890	18x35.5
4700	10	478BPS010M	0.113	1990	18x35.5