

LBB

+85°C Snap-Mount Aluminum Electrolytic Capacitors



For all general purpose filtering applications

FEATURES

- High Ripple Current Ratings
- Large Case Size Selection
- Extended Life
- Voltage Range: 16 WVDC to 450 WVDC
- Capacitance Range: 82 μF to 47,000 μF
- Rugged Design

SPECIFICATIONS

Capacitance Tolerance		$\pm 20\%$ at 120Hz, 20°C														
Operating Temperature Range		-40°C to + 85°C								-25°C to + 85°C						
Dissipation Factor 120Hz, 20°C	WVDC	10	16	25	35	50	63	80	100	160	200	250	350	400	450	
	$\tan \delta$.5	.4	.3	.25	.2	.15	.15	.15	.1*	.1*	.1*	.15	.15	.15	
*Note: .15 for 35mm diameters																
Impedance Ratio (Max.) @120Hz	WVDC	10	16	25	35	50	63	80	100	160	200	250	350	400	450	
	-25°C/20°C	4	4	3	3	2	2	2	2	4	4	4	4	8	8	
	-40°C/20°C	15	15	10	8	6	6	5	5	-	-	-	-	-	-	
Leakage Current	WVDC	≤ 450 WVDC														
	Time	5 minutes														
		.02 CV or 3mA whichever is smaller														
Load Life	3000 hours at +85°C with rated WVDC and rated ripple current															
		Capacitance change Dissipation factor Leakage current				$\leq 20\%$ of initial measured value $\leq 200\%$ of initial specified value $\leq 100\%$ of 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)									
	WVDC	50	120	300	1K	10K	+85C	+70C	+60C	+45C						
	16 to 50	.95	1	1.03	1.05	1.08	1.0	1.32	1.5	1.73						
	6.3 to 100	.92	1	1.07	1.13	1.19	1.0	1.32	1.5	1.73						
	160 to 250	.81	1	1.17	1.32	1.45	1.0	1.32	1.5	1.73						
350 to 450	.77	1	1.16	1.3	1.41	1.0	1.32	1.5	1.73							

SPECIAL ORDER OPTIONS

(See page 37)

- Special tolerances: $\pm 10\%$ (K), -10% + 30% (Q)

LBB

+85°C Snap-Mount
Aluminum Electrolytic
Capacitors

PHYSICAL DIMENSIONS

WVDC (SV) μF	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	80 (100)	100 (125)	160 (200)	200 (250)	250 (300)	350 (400)	400 (450)	450 (500)
82												22x25	22x30
100											22x25	22x30	22x35
												25x25	25x25
120												22x30	22x40
												25x25	25x30
												30x25	30x25
150											22x30	22x35	22x45
											25x25	25x30	25x35
												30x25	30x30
180													25x40
220									22x25	22x25	22x40	22x50	25x45
											25x35	25x40	30x35
											30x25	30x30	35x30
												35x25	35x25
270													30x40
330								22x25	22x30	22x35	25x45	25x50	30x45
								25x25	25x25	25x30	30x35	30x40	35x35
											35x30	35x30	35x35
390													
470								22x30	22x35	22x40	25x50	30x45	35x45
								25x25	25x30	25x35	30x40	35x40	
								30x25	30x25	30x25	35x35		
560								22x35	22x40	22x50	30x50	35x45	
								25x25	25x35	25x40	35x40		
								30x25	30x25	30x30			
680								22x40	22x45	22x45	35x45	35x50	
								25x30	25x35	25x45			
								30x25	30x30	30x35			
									35x25	35x30			
820								22x45	25x40	25x50			
								25x35	30x30	30x40			
								30x30	35x25	35x30			
1000						22x25	22x30	22x50	22x50	25x40			
						25x25	25x25	25x40	25x40	30x45			
								30x30	30x35	35x35			
								35x25	35x30				
1200							22x30	25x45	30x40	30x50			
							25x25	30x35	35x35	35x40			
								35x30					
1500					22x25	22x30	22x35	30x40	35x40	35x50			
					25x25	25x25	25x30	35x35					
							30x25	30x45					
1800								22x40	35x45				
								25x35					
2200				22x25	22x30	22x40	22x50	35x45	35x50				
				25x25	25x30	25x30	25x40						
						30x25	30x30						
							35x25						
3300			22x25	22x30	22x35	22x50	25x50						
				25x25	25x30	25x40	30x40						
					30x25	30x30	35x25						
4700		22x25	22x30	22x35	22x45	25x50	30x50						
			25x25	25x30	25x35	30x40	35x40						
				30x25	30x30	35x30							
					35x25								
6800	22x25	22x30	22x35	22x50	25x50	30x50	35x50						
		25x25	25x30	25x40	25x40	30x35							
			30x25	30x30	30x35	35x30							
				35x25									
10000	22x25	22x35	22x45	25x50	30x45								
		25x30	25x35	25x50	30x35								
		30x25	30x30	30x30	35x30								
			35x25										
15000	22x35	22x45	25x50	30x50	35x50								
	25x30	25x35	30x35	35x40									
	30x25	30x30	35x25										
22000	22x50	25x45	30x45										
	25x40	30x35	35x40										
	30x30	35x30											
	35x25												
33000	30x40	30x50	35x50										
	35x30	35x40											
47000	30x50												
	35x40												

Convert to inches, divide by 25.4.

DxL(mm)

Aluminum Electrolytic



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

LBB

+85°C Snap-Mount
Aluminum Electrolytic
Capacitors

STANDARD PART LISTING

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (A) 120Hz, +85°C	Dimensions DxDL (mm)
82	400	826LBB400M2BC	3.033	0.76	22x25
82	450	826LBB450M2BD	3.033	0.83	22x30
100	350	107LBB350M2BC	2.487	0.86	22x25
100	400	107LBB400M2BD	2.487	0.91	22x30
100	400	107LBB400M2CC	2.487	0.91	25x25
100	450	107LBB450M2BE	2.487	0.97	22x35
100	450	107LBB450M2CC	2.487	0.9	25x25
120	400	127LBB400M2BD	2.072	1	22x30
120	400	127LBB400M2CC	2.072	1	25x25
120	450	127LBB450M2BF	2.072	1.13	22x40
120	450	127LBB450M2CD	2.072	1.08	25x30
120	450	127LBB450M2DC	2.072	1.12	30x25
150	350	157LBB350M2BD	1.658	0.96	22x30
150	350	157LBB350M2CC	1.658	1.1	25x25
150	400	157LBB400M2BE	1.658	1.19	22x35
150	400	157LBB400M2CD	1.658	1.2	25x30
150	400	157LBB400M2DC	1.658	1.25	30x25
150	450	157LBB450M2BG	1.658	1.33	22x45
150	450	157LBB450M2CE	1.658	1.28	25x35
150	450	157LBB450M2DD	1.658	1.34	30x30
180	450	187LBB450M2CF	1.382	1.49	25x40
220	200	227LBB200M2BC	0.754	1.25	22x25
220	250	227LBB250M2BC	0.754	1.31	22x25
220	350	227LBB350M2BF	1.130	1.32	22x40
220	350	227LBB350M2CE	1.130	1.44	25x35
220	350	227LBB350M2DC	1.130	1.3	30x25
220	400	227LBB400M2BH	1.130	1.69	22x50
220	400	227LBB400M2CF	1.130	1.64	25x40
220	400	227LBB400M2DD	1.130	1.62	30x30
220	400	227LBB400M2EC	1.130	1.66	35x25
220	450	227LBB450M2CG	1.130	1.73	25x45
220	450	227LBB450M2DE	1.130	1.72	30x35
220	450	227LBB450M2ED	1.130	1.78	35x30
270	450	277LBB450M2DF	0.921	2.02	30x40
330	160	337LBB160M2BC	0.502	1.4	22x25
330	200	337LBB200M2BD	0.502	1.66	22x30
330	200	337LBB200M2CC	0.502	1.66	25x25
330	250	337LBB250M2BE	0.502	1.85	22x35
330	250	337LBB250M2CD	0.502	1.87	25x30
330	350	337LBB350M2CG	0.754	1.82	25x45
330	350	337LBB350M2DE	0.754	1.83	30x35
330	350	337LBB350M2ED	0.754	1.88	35x30
330	400	337LBB400M2CH	0.754	2.22	25x50
330	400	337LBB400M2DF	0.754	2.23	30x40

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (A) 120Hz, +85°C	Dimensions DxDL (mm)
330	400	337LBB400M2ED	0.754	2.18	35x30
330	450	337LBB450M2DG	0.754	2.35	30x45
330	450	337LBB450M2EE	0.754	2.32	35x35
390	350	397LBB350M2CH	0.638	2.08	25x50
390	400	397LBB400M2DG	0.638	2.55	30x45
470	160	477LBB160M2BD	0.353	1.73	22x30
470	160	477LBB160M2CC	0.353	1.74	25x25
470	200	477LBB200M2BE	0.353	1.78	22x35
470	200	477LBB200M2CD	0.353	2.13	25x30
470	200	477LBB200M2DC	0.353	2.21	30x25
470	250	477LBB250M2BF	0.353	2.34	22x40
470	250	477LBB250M2CE	0.353	2.38	25x35
470	250	477LBB250M2DC	0.353	2.31	30x25
470	250	477LBB250M2EC	0.529	2.54	35x25
470	350	477LBB350M2DF	0.529	2.3	30x40
470	350	477LBB350M2EE	0.529	2.38	35x35
470	400	477LBB400M2EF	0.529	2.92	35x40
470	450	477LBB450M2EG	0.529	3.07	35x45
560	160	567LBB160M2BE	0.296	1.99	22x35
560	160	567LBB160M2CC	0.296	1.95	25x25
560	200	567LBB200M2BF	0.296	2.44	22x40
560	200	567LBB200M2CE	0.296	2.48	25x35
560	200	567LBB200M2DC	0.296	2.41	30x25
560	250	567LBB250M2BH	0.296	2.82	22x50
560	250	567LBB250M2CF	0.296	2.74	25x40
560	250	567LBB250M2DD	0.296	2.71	30x30
560	250	567LBB250M2EC	0.444	2.78	35x25
560	350	567LBB350M2DH	0.444	2.76	30x50
560	350	567LBB350M2EF	0.444	2.75	35x40
560	400	567LBB400M2EG	0.444	3.34	35x45
680	160	687LBB160M2BF	0.244	2.32	22x40
680	160	687LBB160M2CD	0.244	2.21	25x30
680	160	687LBB160M2DC	0.244	2.29	30x25
680	200	687LBB200M2BG	0.244	2.83	22x45
680	200	687LBB200M2CE	0.244	2.73	25x35
680	200	687LBB200M2DD	0.244	2.85	30x30
680	200	687LBB200M2EC	0.366	2.92	35x25
680	250	687LBB250M2CG	0.244	3.19	25x45
680	250	687LBB250M2DE	0.244	3.18	30x35
680	250	687LBB250M2ED	0.366	3.28	35x30
680	350	687LBB350M2EG	0.366	3.18	35x45
680	400	687LBB400M2EH	0.366	3.85	35x50
820	160	827LBB160M2BG	0.202	2.68	22x45
820	160	827LBB160M2CE	0.202	2.58	25x35

LBB

+85°C Snap-Mount
Aluminum Electrolytic
Capacitors

STANDARD PART LISTING

Capacitance (µF)	WVDC	IC [®] PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (A) 120Hz, +85°C	Dimensions DxL (mm)
820	160	827LBB160M2DD	0.202	2.7	30x30
820	200	827LBB200M2CF	0.202	3.17	25x40
820	200	827LBB200M2DD	0.202	3.13	30x30
820	200	827LBB200M2EC	0.303	3.21	35x25
820	250	827LBB250M2CH	0.202	3.67	25x50
820	250	827LBB250M2DF	0.202	3.69	30x40
820	250	827LBB250M2ED	0.303	3.6	35x30
1000	80	108LBB080M2BC	0.249	1.5	22x25
1000	100	108LBB100M2BD	0.249	2	22x30
1000	100	108LBB100M2CC	0.249	2	25x25
1000	160	108LBB160M2BH	0.166	3.11	22x50
1000	160	108LBB160M2CF	0.166	3.02	25x40
1000	160	108LBB160M2DD	0.166	2.98	30x30
1000	160	108LBB160M2EC	0.249	3.05	35x25
1000	200	108LBB200M2CH	0.166	3.87	25x50
1000	200	108LBB200M2DE	0.166	3.68	30x35
1000	200	108LBB200M2ED	0.249	3.8	35x30
1000	250	108LBB250M2DG	0.166	4.28	30x45
1000	250	108LBB250M2EE	0.249	4.22	35x35
1200	100	128LBB100M2BD	0.207	2.1	22x30
1200	100	128LBB100M2CC	0.207	2.1	25x25
1200	160	128LBB160M2CG	0.138	3.49	25x45
1200	160	128LBB160M2DE	0.138	3.48	30x35
1200	160	128LBB160M2ED	0.207	3.59	35x30
1200	200	128LBB200M2DF	0.138	4.26	30x40
1200	200	128LBB200M2EE	0.207	4.42	35x35
1200	250	128LBB250M2DH	0.138	4.91	30x50
1200	250	128LBB250M2EF	0.207	4.88	35x40
1500	63	158LBB063M2BC	0.166	1.66	22x25
1500	80	158LBB080M2BD	0.166	2	22x30
1500	80	158LBB080M2CC	0.166	2	25x25
1500	100	158LBB100M2BE	0.166	2.41	22x35
1500	100	158LBB100M2CD	0.166	2.43	25x30
1500	100	158LBB100M2DC	0.166	2.46	30x25
1500	160	158LBB160M2DF	0.111	4.11	30x40
1500	160	158LBB160M2EE	0.166	4.26	35x35
1500	200	158LBB200M2EF	0.166	5.02	35x40
1500	250	158LBB250M2EH	0.166	5.74	35x50
1800	100	188LBB100M2BF	0.138	2.77	22x40
1800	100	188LBB100M2CE	0.138	2.75	25x35
1800	160	188LBB160M2DG	0.092	4.73	30x45
1800	160	188LBB160M2EE	0.138	4.67	35x35
1800	200	188LBB200M2EG	0.138	4.32	35x45
2200	50	228LBB050M2BC	0.151	1.91	22x25

Capacitance (µF)	WVDC	IC [®] PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (A) 120Hz, +85°C	Dimensions DxL (mm)
2200	63	228LBB063M2BD	0.113	2.31	22x30
2200	63	228LBB063M2CC	0.113	2.3	25x25
2200	80	228LBB080M2BF	0.113	2.44	22x40
2200	80	228LBB080M2CD	0.113	2.46	25x30
2200	80	228LBB080M2DC	0.113	2.49	30x25
2200	100	228LBB100M2BH	0.113	3.08	22x50
2200	100	228LBB100M2CF	0.113	3.13	25x40
2200	100	228LBB100M2DD	0.113	3.09	30x30
2200	100	228LBB100M2EC	0.113	3.14	35x25
2200	160	228LBB160M2EG	0.113	4.96	35x45
2200	200	228LBB200M2EH	0.113	4.92	35x50
3300	35	338LBB035M2BC	0.126	2.05	22x25
3300	50	338LBB050M2BD	0.100	2.37	22x30
3300	50	338LBB050M2CC	0.100	2.38	25x25
3300	63	338LBB063M2BE	0.075	2.62	22x35
3300	63	338LBB063M2CD	0.075	2.64	25x30
3300	63	338LBB063M2DC	0.075	2.78	30x25
3300	80	338LBB080M2BH	0.075	3.16	22x50
3300	80	338LBB080M2CF	0.075	3.21	25x40
3300	80	338LBB080M2DD	0.075	3.17	30x30
3300	80	338LBB080M2EC	0.075	3.5	35x25
3300	100	338LBB100M2CH	0.075	4.06	25x50
3300	100	338LBB100M2DF	0.075	4.05	30x40
3300	100	338LBB100M2ED	0.075	4.05	35x30
4700	25	478LBB025M2BC	0.106	2.25	22x25
4700	35	478LBB035M2BD	0.088	2.41	22x30
4700	35	478LBB035M2CC	0.088	2.42	25x25
4700	50	478LBB050M2BE	0.071	2.72	22x35
4700	50	478LBB050M2CD	0.071	2.98	25x30
4700	50	478LBB050M2DC	0.071	2.81	30x25
4700	63	478LBB063M2BG	0.053	3.04	22x45
4700	63	478LBB063M2CE	0.053	2.79	25x35
4700	63	478LBB063M2DD	0.053	3.32	30x30
4700	63	478LBB063M2EC	0.053	3.36	35x25
4700	80	478LBB080M2CH	0.053	4.05	25x50
4700	80	478LBB080M2DF	0.053	4.05	30x40
4700	80	478LBB080M2ED	0.053	4.09	35x30
4700	100	478LBB100M2DH	0.053	5.13	30x50
4700	100	478LBB100M2EF	0.053	5.11	35x40
6800	16	688LBB016M2BC	0.122	2.4	22x25
6800	25	688LBB025M2BD	0.073	2.4	22x30
6800	25	688LBB025M2CC	0.073	2.56	25x25
6800	35	688LBB035M2BE	0.061	2.82	22x35
6800	35	688LBB035M2CD	0.061	2.74	25x30

Aluminum Electrolytic

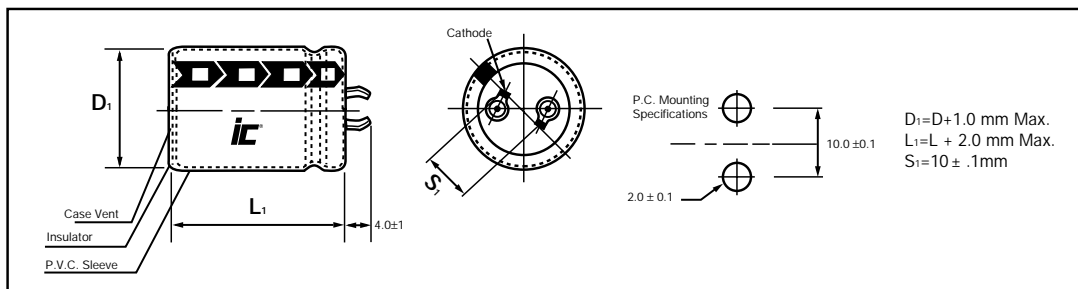
LBB

+85°C Snap-Mount
Aluminum Electrolytic
Capacitors

STANDARD PART LISTING

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (A) 120Hz, +85°C	Dimensions D x L (mm)
6800	35	688LBB035M2DC	0.061	2.97	30x25
6800	50	688LBB050M2BH	0.049	3.81	22x50
6800	50	688LBB050M2CF	0.049	3.81	25x40
6800	50	688LBB050M2DD	0.049	3	30x30
6800	50	688LBB050M2EC	0.049	3.23	35x25
6800	63	688LBB063M2CH	0.037	4.27	25x50
6800	63	688LBB063M2DE	0.037	3.46	30x35
6800	63	688LBB063M2ED	0.037	4.15	35x30
6800	80	688LBB080M2DH	0.037	5.16	30x50
6800	80	688LBB080M2EF	0.037	5.14	35x40
6800	100	688LBB100M2EH	0.037	6.5	35x50
10000	16	109LBB016M2BC	0.083	2.77	22x25
10000	25	109LBB025M2BE	0.050	3.2	22x35
10000	25	109LBB025M2CD	0.050	3.12	25x30
10000	25	109LBB025M2DC	0.050	3.21	30x25
10000	35	109LBB035M2BG	0.041	3.34	22x45
10000	35	109LBB035M2CE	0.041	3.06	25x35
10000	35	109LBB035M2DD	0.041	3.46	30x30
10000	35	109LBB035M2EC	0.041	3.02	35x25
10000	50	109LBB050M2CH	0.033	3.7	25x50
10000	50	109LBB050M2DE	0.033	3.35	30x35
10000	50	109LBB050M2ED	0.033	3.64	35x30
10000	63	109LBB063M2DG	0.025	3.72	30x45
10000	63	109LBB063M2EF	0.025	5.47	35x40
15000	16	159LBB016M2BE	0.055	3.29	22x35
15000	16	159LBB016M2CD	0.055	3.46	25x30
15000	16	159LBB016M2DC	0.055	3.66	30x25

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR Ω 120Hz, +20°C	Maximum RMS Ripple Current (A) 120Hz, +85°C	Dimensions D x L (mm)
15000	25	159LBB025M2BG	0.033	3.7	22x45
15000	25	159LBB025M2CE	0.033	3.45	25x35
15000	25	159LBB025M2DD	0.033	4	30x30
15000	25	159LBB025M2EC	0.033	3.95	35x25
15000	35	159LBB035M2CH	0.028	4.54	25x50
15000	35	159LBB035M2DE	0.028	3.67	30x35
15000	35	159LBB035M2ED	0.028	3.98	35x30
15000	50	159LBB050M2DH	0.022	4.61	30x50
15000	50	159LBB050M2EF	0.022	4.83	35x40
15000	63	159LBB063M2EH	0.017	5.3	35x50
22000	16	229LBB016M2BH	0.038	4.37	22x50
22000	16	229LBB016M2CF	0.038	4.26	25x40
22000	16	229LBB016M2DD	0.038	4.21	30x30
22000	16	229LBB016M2EC	0.038	4.15	35x25
22000	25	229LBB025M2CG	0.023	4.48	25x45
22000	25	229LBB025M2DE	0.023	4.52	30x35
22000	25	229LBB025M2ED	0.023	4.61	35x30
22000	35	229LBB035M2DG	0.019	4.94	30x45
22000	35	229LBB035M2EF	0.019	5.41	35x40
33000	16	339LBB016M2DF	0.025	5.36	30x40
33000	16	339LBB016M2ED	0.025	5.15	35x30
33000	25	339LBB025M2DH	0.015	6.15	30x50
33000	25	339LBB025M2EF	0.015	6.33	35x40
33000	35	339LBB035M2EH	0.013	7.27	35x50
47000	16	479LBB016M2DH	0.018	6.79	30x50
47000	16	479LBB016M2EF	0.018	6.76	35x40



3 and 4 pin mounting styles available on special order. Contact I.C. for details