



FEATURES

Multiple case sizes - High voltage – High Current

APPLICATIONS

Filtering – Switching Power Supplies

Operating Temperature Range		-40°C to +85°C (10VDC to 250VDC) -25°C to +85°C (350VDC to 500VDC)															
Capacitance Tolerance		+20% at 120 Hz, 20°C															
Surge Voltage	WVDC	10	16	25	35	50	63	80	100	160	200	250	350	400	450	500	
	SVDC	13	20	32	44	63	79	100	120	200	250	300	400	450	500	550	
Dissipation Factor (120 Hz)	WVDC	10	16	25	35	50	63	80	100	160	200	250	350	400	450	500	
	tan δ	.55	.5	.45	.4	.35	.3	.25	.2	.15	.15	.15	.15	.15	.2	.2	
		For capacitance values above 33000µF add the following to the Dissipation factors values above (capacitance-33000 µF)*0.1 10000 µF															
Leakage Current @20°C, Rated WVDC applied		Time	5 Minutes														
		$3\sqrt{CV}$															
Impedance Ratio (120 Hz)	WVDC	10	16	25	35	50	63	80	100	160	200	250	350	400	450	500	
	-25°C/+20°C	4	4	4	4	4	4	4	4	3	3	3	3	8	8	8	
	-40°C/+20°C	15	15	15	15	15	15	15	15	15	15	15	15	-	-	-	-
Load Life		2000 hours with rated voltage applied at 85°C with full rated ripple current applied															
		Capacitance Change		≤20% of initial measured value													
		Dissipation Factor		≤200% of maximum specified value													
		Leakage Current		≤100% of maximum specified value													
Shelf Life		1000 hours at 85°C with no voltage applied															
		Capacitance Change		≤20% of initial measured value													
		Dissipation Factor		≤200% of maximum specified value													
		Leakage Current		≤100% of maximum specified value													
Ripple Current Multipliers		Frequency (Hz)															
		WVDC			60	120	1k	10k									
		10 to 100			0.9	1.0	1.15	1.25									
		160 to 250			0.8	1.0	1.15	1.47									
		350 to 500			0.8	1.0	1.15	1.47									



Lead style options

Code 2 (Standard) Diameter 20 to 40 mm	Code Z Diameter 20 to 40 mm												
Code P Diameter 22 to 35 mm	Code D Diameter 30 to 40 mm												
Code 9 Diameter 25 to 35 mm	Code T Diameter 25 to 35 mm												
Code 4 Diameter 35 to 45 mm	Code 4S (straight leads) Diameter 35 to 45 mm												
Code 5 Diameter 40 to 50 mm	Code G <table><tr><td>D</td><td>35</td><td>40</td><td>50</td><td>63</td><td>76</td></tr><tr><td>P</td><td>14</td><td>14</td><td>18</td><td>25</td><td>25</td></tr></table> Diameter 35 to 76 mm	D	35	40	50	63	76	P	14	14	18	25	25
D	35	40	50	63	76								
P	14	14	18	25	25								

LBA

+85°C Standard 2000 hrs

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (A) 120 Hz, +105°C	Dims DxL (mm)
47	450	476LBA450M2BC	7054.74	0.46	22x25
68	450	686LBA450M2CC	4876.07	0.6	22x25
100	350	107LBA350M2CC	2486.8	0.63	25x25
100	350	107LBA350M2BD	2486.8	0.65	22x30
100	400	107LBA400M2BD	2486.8	0.68	22x30
100	450	107LBA450M2BE	3315.73	0.77	22x35
100	500	107LBA500M2BF	3315.73	0.85	22x40
100	500	107LBA500M2CD	3315.73	0.81	25x30
100	500	107LBA500M2DC	3315.73	0.84	30x25
150	250	157LBA250M2CA	1657.86	0.85	25x20
150	400	157LBA400M2BF	1657.86	0.94	22x40
150	400	157LBA400M2CD	1657.86	0.89	25x30
150	500	157LBA500M2BH	2210.49	1.15	22x50
150	500	157LBA500M2DE	2210.49	1.18	30x35
150	500	157LBA500M2ED	2210.49	1.22	35x30
220	160	227LBA160M2BA	1130.36	1	22x20
220	200	227LBA200M2BC	1130.36	1.14	22x25
220	200	227LBA200M2CA	1130.36	1.1	25x20
220	250	227LBA250M2DA	1130.36	1.1	30x20
220	250	227LBA250M2BD	1130.36	1.2	22x30
220	250	227LBA250M2CC	1130.36	1.15	25x25
220	350	227LBA350M2DD	1130.36	1.29	30x30
220	450	227LBA450M2DF	1507.15	1.44	30x40
220	500	227LBA500M2DG	1507.15	1.59	30x45
220	500	227LBA500M2EE	1507.15	1.57	35x35
330	250	337LBA250M2CD	753.57	1.67	25x30
330	250	337LBA250M2BF	753.57	1.72	22x40
330	350	337LBA350M2DD	753.57	2.03	30x30
330	350	337LBA350M2ED	753.57	1.88	35x30
330	400	337LBA400M2DG	753.57	1.74	30x45
330	500	337LBA500M2EG	1004.77	2.13	35x45
470	160	477LBA160M2CC	529.11	1.52	25x25
470	200	477LBA200M2BF	529.11	2.02	22x40
470	200	477LBA200M2CE	529.11	1.8	25x35
470	200	477LBA200M2DC	529.11	1.97	30x25
470	200	477LBA200M2CD	529.11	1.91	25x30
470	250	477LBA250M2BH	529.11	2.08	22x50
470	250	477LBA250M2CF	529.11	2.03	25x40
470	250	477LBA250M2DD	529.11	1.97	30x30
470	400	477LBA400M2EG	529.11	2.23	35x45
470	400	477LBA400M2FE	0.5294	2.16	40x35
470	450	477LBA450M2EH	529.11	2.5	35x50
560	200	567LBA200M2CE	444.07	2.22	25x35
680	100	687LBA100M2BC	487.61	1.85	22x25
680	160	687LBA160M2DC	365.71	2.1	30x25
680	250	687LBA250M2DE	365.71	2.4	30x35
680	250	687LBA250M2DF	365.71	2.55	30x40
680	250	687LBA250M2ED	365.71	2.48	35x30
820	200	827LBA200M2DF	303.27	2.85	30x40
820	400	827LBA400M2EH	303.27	4	35x50
1000	80	108LBA080M2BC	414.47	1.65	22x25
1000	100	108LBA100M2CC	331.57	2.03	25x25
1000	100	108LBA100M2BE	331.57	2.08	22x35
1000	160	108LBA160M2EC	248.68	2.8	35x25
1000	160	108LBA160M2DD	248.68	2.8	30x30
1000	200	108LBA200M2DG	248.68	3.42	30x45
1000	200	108LBA200M2EE	248.68	3.35	35x35
1000	250	108LBA250M2DG	248.68	3	30x45

Capacitance (µF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (A) 120 Hz, +105°C	Dims DxL (mm)
1000	250	108LBA250M2DH	248.68	3.65	30x50
1000	250	108LBA250M2EF	248.68	3.58	35x40
1200	160	128LBA160M2DE	209.23	3.2	30x35
1200	160	128LBA160M2ED	207.23	3.2	35x30
1200	200	128LBA200M2EF	207.23	3.47	35x40
1500	63	158LBA063M2BC	331.57	2	22x25
1500	80	158LBA080M2CC	276.31	2.15	25x25
1500	100	158LBA100M2CE	221.05	2.76	25x35
1500	160	158LBA160M2EE	165.79	3.48	35x35
1500	200	158LBA200M2EG	165.79	4.1	35x45
1500	200	158LBA200M2EF	165.79	3.8	35x40
1500	200	158LBA200M2DG	165.79	3.75	30x45
1500	250	158LBA250M2EH	165.79	4	35x50
1800	200	188LBA200M2EG	138.16	4.2	35x45
1800	200	188LBA200M2EH	138.16	4.38	35x50
2200	35	228LBA035M2CA	301.43	1.7	25x20
2200	50	228LBA050M2BC	263.75	2	22x25
2200	63	228LBA063M2CC	226.07	2.3	25x25
2200	80	228LBA080M2BF	188.39	2.71	22x40
2200	80	228LBA080M2CE	188.39	2.66	25x35
2200	100	228LBA100M2CG	150.71	3.41	25x45
2200	100	228LBA100M2DE	150.71	3.35	30x35
2200	100	228LBA100M2ED	150.71	3.28	35x30
2200	160	228LBA160M4FF	113.04	4.57	40x40
2200	200	228LBA200M2EH	113.04	4.7	35x50
3300	35	338LBA035M2BC	200.95	2.2	22x25
3300	50	338LBA050M2CC	175.83	2.35	25x25
3300	50	338LBA050M2BD	175.83	2.4	22x30
3300	50	338LBA050M2BC	401.9	1.8	22x25
3300	63	338LBA063M2CE	150.71	2.81	25x35
3300	80	338LBA080M2CG	125.6	3.41	25x45
3300	100	338LBA100M2EE	100.48	3.58	35x35
4700	25	478LBA025M2BC	158.73	2.2	22x25
4700	25	478LBA025M2AC	158.73	2.18	20x25
4700	35	478LBA035M2BD	141.09	2.4	22x30
4700	35	478LBA035M2CC	141.09	2.35	25x25
4700	50	478LBA050M2BF	123.46	2.91	22x40
4700	50	478LBA050M2CE	123.46	2.86	25x35
4700	50	478LBA050M2DD	123.46	2.8	30x25
4700	63	478LBA063M2DD	105.82	3.2	30x30
4700	63	478LBA063M2EC	105.82	3.13	35x25
4700	63	478LBA063M2CE	105.82	3.59	25x35
4700	80	478LBA080M2ED	88.18	3.3	35x30
4700	100	478LBA100M2EG	70.55	4.3	35x45
5600	25	568LBA025M2BD	133.22	2.4	22x30
6800	25	688LBA025M2BE	109.71	2.6	22x35
6800	25	688LBA025M2CC	109.71	2.55	25x25
6800	35	688LBA035M2BF	97.52	3.06	22x40
6800	35	688LBA035M2CD	97.52	3.01	25x30
6800	35	688LBA035M2DC	97.52	2.95	30x25
6800	35	688LBA035M2BE	60.95	2.9	22x35
6800	50	688LBA050M2DD	85.33	3.69	30x30
6800	50	688LBA050M2CG	85.33	3.86	25x45
6800	50	688LBA050M2ED	85.33	3.73	35x30
6800	63	688LBA063M2EE	73.14	4.15	35x35
6800	80	688LBA080M2EG	60.95	4.8	35x45
8200	16	828LBA016M2BC	101.09	2.37	22x25
8200	25	828LBA025M2BE	90.98	3.31	22x35

LBA

+85°C Standard 2000 hrs

Capacitance (μF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (A) 120 Hz, +105°C	Dims DxL (mm)
8200	35	828LBA035M2CE	80.87	3.45	25x35
10000	16	109LBA016M2BD	82.89	2.84	22x30
10000	16	109LBA016M2CC	82.89	2.76	25x25
10000	25	109LBA025M2BG	74.6	3.4	22x45
10000	25	109LBA025M2DC	74.6	3.31	30x25
10000	35	109LBA035M2DD	66.31	4	30x30
10000	35	109LBA035M2EC	66.31	3.93	35x25
10000	50	109LBA050M2EE	58.03	4.7	35x35
10000	63	109LBA063M2EG	49.74	5.2	35x45
15000	10	159LBA010M2CC	60.79	2.76	25x25
15000	16	159LBA016M2BF	55.26	3.94	22x40
15000	16	159LBA016M2DC	55.26	3.51	30x25
15000	25	159LBA025M2CG	49.74	4.5	25x45
15000	25	159LBA025M2ED	49.74	4.39	35x30
15000	35	159LBA035M2DF	44.21	5.07	30x40

Capacitance (μF)	WVDC	IC PART NUMBER	Maximum ESR (mΩ) 120 Hz, +20°C	Maximum RMS Ripple Current (A) 120 Hz, +105°C	Dims DxL (mm)
15000	35	159LBA035M2EE	44.21	5	35x35
15000	50	159LBA050M2EG	38.68	5.9	35x45
22000	10	229LBA010M2DC	41.45	3.49	30x25
22000	16	229LBA016M2EC	37.68	4.13	35x25
22000	16	229LBA016M2BH	37.68	5.23	22x50
22000	16	229LBA016M2DD	37.68	4.45	30x30
22000	25	229LBA025M2EE	33.91	5.73	35x35
22000	25	229LBA025M2FD	33.91	5.65	40x30
22000	35	229LBA035M2EG	30.14	6.25	35x45
33000	16	339LBA016M2DF	25.12	5.8	30x40
33000	16	339LBA016M2ED	25.12	5.15	35x30
33000	25	339LBA025M2EH	15.07	7.2	35x50
47000	16	479LBA016M2DH	22.58	6.78	30x50
47000	16	479LBA016M2EF	22.58	6.71	35x40