



LB & LB-H Series

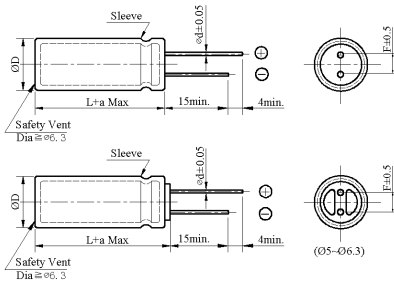
- Low leakage current at 85 °C & 105°C



◆ SPECIFICATIONS

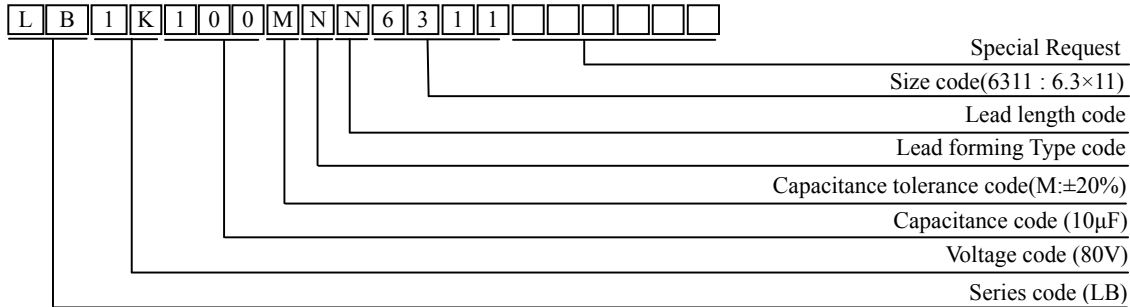
Item	Performance Characteristics									
	LB					LB-H				
Series	LB					LB-H				
Category Temperature Range	-40 ~ +85°C					-40 ~ +105°C				
Working Voltage Range	6.3 ~ 100 Vdc									
Capacitance Range	0.47 ~ 4,700 µF									
Capacitance Tolerance	±20% (at 25°C and 120Hz)									
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	80	100
	tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.10	0.10
The above values should be increased by 0.02 for every additional 1000µF										
Leakage Current	I=0.002CV or 0.4µA whichever is greater I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes									
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100
	Z(-40°C)/Z(+20°C)	12	10	8	5	4	3	3	3	3
(at 120Hz)										
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 2,000 hours at 85°C(LB) or 1,000 hours at 105°C(LB-H).									
	Capacitance change	≒ ±20% of the initial value								
	Dissipation factor(tanδ)	≒ 200% of the specified value								
	Leakage current	≒ specified value								
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 1,000 hours at 85°C(LB) or 500 hours at 105°C(LB-H) without voltage applied.									
	Capacitance change	≒ ±20% of the initial value								
	Dissipation factor(tanδ)	≒ 200% of the specified value								
	Leakage current	≒ 200% of the specified value								
Others	Conforms to JIS-C-5101-4 (1998), characteristic W									

◆ DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5 L < 35	12.5 L ≥ 35	16	18
ΦD	ΦD + 0.5 Max							
Φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0		7.5	7.5
a	L + 1.5 Max		≒ 35 L + 1.5 Max ≒ 40 L + 2.0 Max				L + 1.5 Max	

◆ PART NUMBER SYSTEM(Example : 80V 10µF)





LB-H Series

◆ **Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz**

uF \ Vdc	6.3		10		16		25		35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
15									5×11	40
22							5×11	50	6.3×11	60
33					5×11	55	6.3×11	68	6.3×11	73
47			5×11	60	6.3×11	75	6.3×11	80	8×11.5	100
68	5×11	72	6.3×11	87	6.3×11	102	8×11.5	110	8×11.5	135
100	5×11	95	6.3×11	100	8×11.5	130	8×11.5	135	10×12.5	170
150	6.3×11	122	8×11.5	134	8×11.5	175	10×12.5	198	10×16	238
220	6.3×11	150	8×11.5	170	10×12.5	225	10×16	260	10×20	305
330	8×11.5	225	10×12.5	245	10×16	300	10×20	345	12.5×20	415
470	10×12.5	265	10×16	325	10×16	390	12.5×20	460	12.5×25	535
680	10×16	320	10×20	420	12.5×20	530	12.5×20	650	12.5×25	720
1000	10×20	462	10×20	570	12.5×20	675	12.5×25	725	16×25	870
1500	12.5×20	600	12.5×20	753	12.5×25	860	16×31.5	1015	16×35.5	1115
2200	12.5×20	790	12.5×25	960	16×25	1050	16×31.5	1235	18×35.5	1360
3300	16×25	1033	16×25	1195	16×31.5	1585	18×40	1630	18×40	1800
4700	16×31.5	1275	16×31.5	1420	18×35.5	1890	18×40	2140		

uF \ Vdc	50		63		80		100	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
0.47							5×11	10
1.0	5×11	12	5×11	12	5×11	12	5×11	15
2.2	5×11	18	5×11	20	5×11	21	5×11	22
3.3	5×11	22	5×11	24	5×11	25	5×11	27
4.7	5×11	27	5×11	30	5×11	32	6.3×11	36
6.8	5×11	30	5×11	37	6.3×11	42	6.3×11	45
10	5×11	40	6.3×11	50	8×11.5	55	8×11.5	61
15	5×11	50	8×11.5	65	8×11.5	75	10×12.5	82
22	6.3×11	65	8×11.5	85	10×12.5	95	10×12.5	106
33	6.3×11	93	8×11.5	105	10×12.5	133	10×16	142
47	8×11.5	112	10×12.5	145	10×16	155	10×20	184
68	8×11.5	160	10×16	200	10×20	220	12.5×20	240
100	10×12.5	207	10×20	252	12.5×20	280	12.5×20	300
150	10×16	290	12.5×20	330	12.5×20	364	12.5×25	414
220	10×20	370	12.5×20	414	12.5×25	450	16×25	533
330	12.5×20	455	12.5×25	550	16×31.5	650	16×31.5	702
470	16×25	652	16×25	725	16×35.5	805	18×35.5	890
680	16×25	860	16×31.5	1000	18×35.5	1080		
1000	16×31.5	1020	18×35.5	1220				
1500	18×40	1320						
2200	18×40	1580						

◆ **RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

Cap(uF)	Frequency (Hz)				
	50/60	120	1K	10K	100K
0.47 ~ 68	0.75	1.00	1.57	1.75	2.00
100 ~ 680	0.80	1.00	1.34	1.40	1.50
1000 ~ 4700	0.85	1.00	1.13	1.13	1.13