

**MLB Series**

- 85°C 8,000Hrs assured.

- Non-solvent proof.
- Long Life.
- For LED TV Power, SMPS.
- RoHS compliant.
- Halogen-free capacitors are also available.



**SPECIFICATIONS**

Item	Characteristics										
Rated Voltage Range	400 V <sub>DC</sub>	420 ~ 500 V <sub>DC</sub>									
Operating Temperature Range	-40 ~ + 85°C	-25 ~ + 85°C									
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)										
Leakage Current	<table border="1"> <thead> <tr> <th>C · V</th> <th>After 1 minute</th> <th>After 5 minutes</th> </tr> </thead> <tbody> <tr> <td>≤ 1000</td> <td>I = 0.1CV + 40</td> <td>I = 0.03CV + 15</td> </tr> <tr> <td>&gt; 1000</td> <td>I = 0.04CV + 100</td> <td>I = 0.02CV + 25</td> </tr> </tbody> </table>		C · V	After 1 minute	After 5 minutes	≤ 1000	I = 0.1CV + 40	I = 0.03CV + 15	> 1000	I = 0.04CV + 100	I = 0.02CV + 25
	C · V	After 1 minute	After 5 minutes								
	≤ 1000	I = 0.1CV + 40	I = 0.03CV + 15								
> 1000	I = 0.04CV + 100	I = 0.02CV + 25									
Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V <sub>DC</sub> ) (at 20°C)											
Dissipation Factor(Tanδ)	Rated Voltage(V <sub>DC</sub> )	400 ~ 500									
	Tanδ(Max.)	0.24 (at 20°C, 120Hz)									
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V <sub>DC</sub> )	400	420~500								
	Z(-25°C)/Z(+20°C)	5	6								
	Z(-40°C)/Z(+20°C)	6	-								
(at 120Hz)											
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage)for 8,000 hours at 85°C.										
	Capacitance change	≤ ±20% of the initial value									
	Tanδ	≤ 200% of the initial specified value									
	Leakage current	≤ The initial specified value									
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.										
	Capacitance change	≤ ±20% of the initial value									
	Tanδ	≤ 200% of the initial specified value									
	Leakage current	≤ 500% of the initial specified value									
Others	Satisfied characteristics KS C IEC 60384-4										

**DIMENSIONS OF MLB Series**

Unit(mm)

Marking : BLACK SLEEVE, WHITE INK

øD	10	12.5	16	18
ød	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
øD'	øD + 0.5 max.			
L'	L + 2.0 max.			

※ ø16 x 60L, L' ≤ L + 3.0

MLB Series

## RATINGS OF MLB Series

V <sub>bc</sub>	Cap.( $\mu$ F)	Case size $\varnothing$ D x L (mm)	Rated Ripple Current (mArms/85°C)				
			120Hz	1KHz	10KHz	50KHz	100KHz
400	68	16 X 31.5	563	704	845	985	1,126
		18 X 25	544	680	816	952	1,088
	82	16 X 35.5	650	813	975	1,138	1,300
		18 X 31.5	650	813	975	1,138	1,300
	100	16 X 40	780	975	1,170	1,365	1,560
		18 X 31.5	700	875	1,050	1,225	1,400
	120	16 X 45	889	1,111	1,334	1,556	1,778
		18 X 35.5	830	1,038	1,245	1,453	1,660
	150	16 X 50	980	1,225	1,470	1,715	1,960
	420	68	16 X 31.5	550	688	825	963
18 X 25			533	666	800	933	1,066
82		16 X 35.5	630	788	945	1,103	1,260
		18 X 31.5	630	788	945	1,103	1,260
100		16 X 40	750	938	1,125	1,500	1,575
		18 X 35.5	720	900	1,080	1,440	1,512
120		16 X 45	840	1,050	1,260	1,700	1,730
		18 X 40	840	1,050	1,260	1,700	1,730
150		16 X 50	920	1,150	1,380	1,760	1,840
450		47	10 X 50	420	525	630	735
	56	12.5 X 40	470	588	705	823	940
		12.5 X 45	540	675	810	945	1,080
	68	16 X 31.5	550	688	825	1,476	1,476
		16 X 35.5	578	723	867	1,012	1,156
		18 X 31.5	560	700	840	980	1,120
	82	12.5 X 50	620	775	930	1,085	1,240
		16 X 35.5	630	788	945	1,103	1,260
		16 X 40	656	820	984	1,500	1,500
		18 X 31.5	630	788	945	1,103	1,260
	100	12.5 X 60	710	888	1,065	1,243	1,420
		16 X 40	720	900	1,080	1,940	1,940
		16 X 45	760	950	1,140	1,940	1,940
		18 X 35.5	720	900	1,080	1,440	1,512
	120	16 X 50	865	1,081	1,298	2,112	2,112
		18 X 40	840	1,050	1,260	1,700	1,730
150	16 X 50	920	1,150	1,380	1,760	1,840	
500	10	12.5 X 16	115	144	173	201	230
	22	16 X 25	230	288	345	403	460
	33	10 X 50	310	388	465	543	620
	47	12.5 X 40	380	475	570	665	760
		16 X 35.5	435	544	653	761	870
	56	12.5 X 45	460	575	690	805	920
		16 X 40	491	614	737	859	982
	68	12.5 X 50	510	638	765	893	1,020
		16 X 40	523	654	785	1,460	1,460
		16 X 45	563	704	845	985	1,126
	82	12.5 X 60	600	750	900	1,050	1,200
		16 X 40	580	725	870	1,480	1,480
		16 X 45	610	763	915	1,500	1,500
		16 X 50	630	788	945	1,103	1,260
	100	16 X 50	700	875	1,050	1,848	1,848
		18 X 45	700	875	1,050	1,410	1,500
	120	16 X 60	830	1,038	1,245	2,070	2,070
		18 X 50	830	1,038	1,245	1,700	1,730