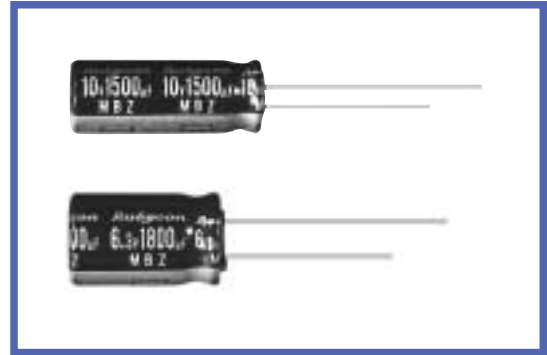


MBZ SERIES
105°C Ultra Low ESR, for PC mother board.
◆ FEATURES

- Ultra Low ESR for VRM.
- Enabled high ripple current by a reduction of ESR at high frequency range.
- RoHS compliance


◆ SPECIFICATIONS

Items	Characteristics								
Category Temperature Range	-40~+105°C								
Rated Voltage Range	6.3~16V.DC								
Capacitance Tolerance	±20%(20°C, 120Hz)								
Leakage Current(MAX)	I=0.03CV (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)								
Dissipation Factor(MAX) (tanδ)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> </tr> <tr> <td>tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> </tr> </table> (20°C,120Hz) When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.	Rated Voltage (V)	6.3	10	16	tanδ	0.22	0.19	0.16
Rated Voltage (V)	6.3	10	16						
tanδ	0.22	0.19	0.16						
Endurance	After applying rated voltage with rated ripple current for 2000hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>	Capacitance Change	Within ±25% of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.		
Capacitance Change	Within ±25% of the initial value.								
Dissipation Factor	Not more than 200% of the specified value.								
Leakage Current	Not more than the specified value.								
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage(V)</td> <td>6.3</td> <td>10</td> <td>16</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> </tr> </table> (120Hz)	Rated Voltage(V)	6.3	10	16	Z(-25°C)/Z(20°C)	2	2	2
Rated Voltage(V)	6.3	10	16						
Z(-25°C)/Z(20°C)	2	2	2						

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

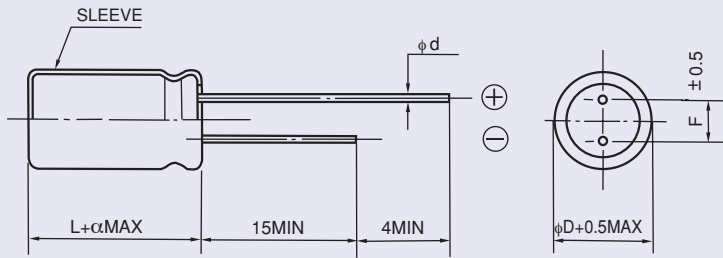
Frequency(Hz)	120	1k	10k	100k≤
Coefficient	0.50	0.80	0.90	1.00

◆ PART NUMBER

□□□	MBZ	□□□□□	□	□□□	□□	D×L
Rated Voltage	Series	Rated Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆ DIMENSIONS

(mm)



ϕD	8	10
ϕd	0.6	
F	3.5	5.0
α	$L \leq 16 : \alpha = 1.5$ $L \geq 20 : \alpha = 2.0$	

◆ STANDARD SIZE

Rated voltage 6.3V(0J)			
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR ($m\Omega$ MAX/20°C, 100kHz)
820	8×11.5	1140	36
1200	8×16	1490	28
1800	8×20	1870	19
1500	10×12.5	1540	26
1800	10×16	2000	19
2200	10×20	2550	13
3300	10×23	2800	12

Rated voltage 10V(1A)			
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR ($m\Omega$ MAX/20°C, 100kHz)
680	8×11.5	1140	36
1000	8×16	1490	28
1500	8×20	1870	19
1000	10×12.5	1540	26
1500	10×16	2000	19
1800	10×20	2550	13
2200	10×23	2800	12

Rated voltage 16V(1C)			
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR ($m\Omega$ MAX/20°C, 100kHz)
470	8×11.5	1140	36
680	8×16	1490	28
1000	8×20	1870	19
680	10×12.5	1540	26
1000	10×16	2000	19
1500	10×20	2550	13
1800	10×23	2800	12