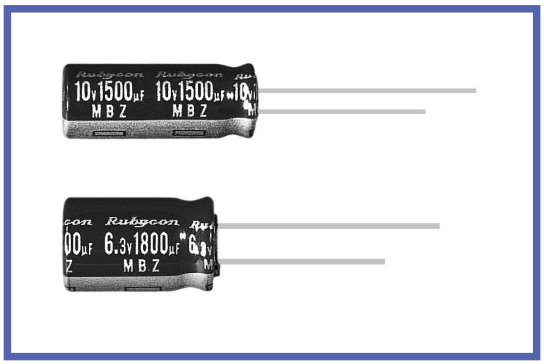
MBZ SERIES

105°C Ultra Low ESR.



♦FEATURES

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

♦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 3 minutes application of rated voltage) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)
Dissipation Factor(MAX)	(20°C,120Hz) When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.
Endurance	After applying rated voltage with rated ripple current for 2000hrs at 105°C, the capacitors shall meet the following requirements.
Low Temperature Stability Impedance Ratio(MAX)	(120Hz)

Dissipation Factor(MAX) — Rated Voltage (V) / tanδ:

Rated Voltage (V)	6.3	10	16
tanδ	0.22	0.19	0.16

Endurance:

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):

Rated Voltage (V)	6.3	10	16
Z(-25°C)/Z(20°C)	2	2	2
Z(-40°C)/Z(20°C)	3	3	3

♦MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

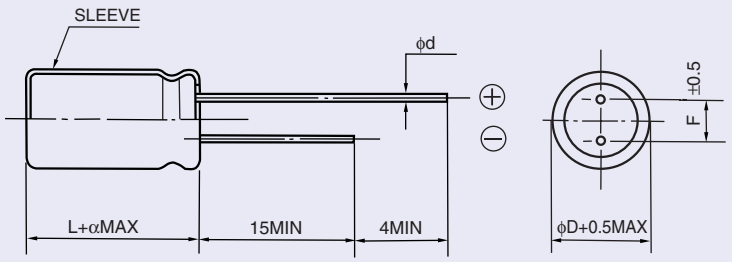
Frequency (Hz)	120	1k	10k	100k≦
Coefficient	0.50	0.80	0.90	1.00

♦PART NUMBER

□□□	MBZ	□□□□□	□	□□□	□□	DxL
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≦16 :α=1.5 L≧20 :α=2.0	

♦STANDARD SIZE

Rated voltage 6.3V(0J)			
Rated capacitance (μF)	Size ϕDxL (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR (mΩMAX/20°C, 100kHz)
820	8X11.5	1140	36
1200	8X16	1490	28
1800	8X20	1870	19
1500	10X12.5	1540	26
1800	10X16	2000	19
2200	10X20	2550	13
3300	10X23	2800	12

Rated voltage 10V(1A)			
Rated capacitance (μF)	Size ϕDxL (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR (mΩMAX/20°C, 100kHz)
680	8X11.5	1140	36
1000	8X16	1490	28
1500	8X20	1870	19
1000	10X12.5	1540	26
1500	10X16	2000	19
1800	10X20	2550	13
2200	10X23	2800	12

Rated voltage 16V(1C)			
Rated capacitance (μF)	Size ϕDxL (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR (mΩMAX/20°C, 100kHz)
470	8X11.5	1140	36
680	8X16	1490	28
1000	8X20	1870	19
680	10X12.5	1540	26
1000	10X16	2000	19
1500	10X20	2550	13
1800	10X23	2800	12