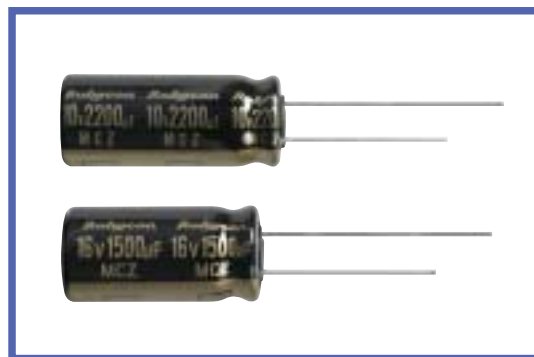


MCZ SERIES

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)								
DissipationFactor(MAX) (tanδ)	<table><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><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><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

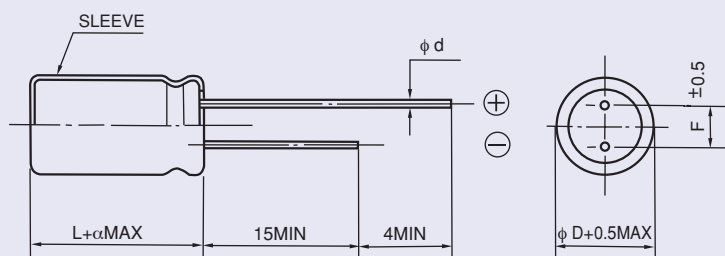
Frequency(Hz)	120	1k	10k	100k≤
Coefficient	0.50	0.80	0.90	1.00

◆PART NUMBER

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Rated Voltage	MCZ Series	Rated Capacitance	Capacitance Tolerance	Option	Lead Forming	DxL Case Size

◆ DIMENSIONS

(mm)



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

◆ 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 Ω MAX/20°C, 100kHz)
820	8×11.5	1340	21
1200	8×16	1850	18
1800	8×20	2350	12
1500	10×12.5	1960	16
1800	10×16	2460	12.5
2200	10×20	2770	11
3300	10×25	3230	9

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 Ω MAX/20°C, 100kHz)
680	8×11.5	1340	21
1000	8×16	1850	18
1500	8×20	2350	12
1000	10×12.5	1960	16
1500	10×16	2460	12.5
1800	10×20	2770	11
2200	10×25	3230	9

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 Ω MAX/20°C, 100kHz)
470	8×11.5	1340	21
680	8×16	1850	18
1000	8×20	2350	12
680	10×12.5	1960	16
1000	10×16	2460	12.5
1500	10×20	2770	11
1800	10×25	3230	9