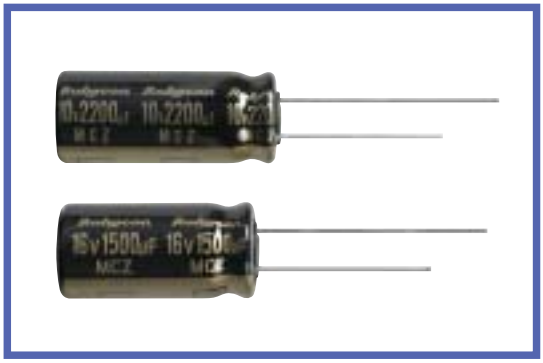
MCZ SERIES

105℃ 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(μ A) C=Rated Capacitance(μ F) V=Rated Voltage(V)
Dissipation Factor(MAX) (tanδ)	Rated Voltage (V): 6.3 / 10 / 16 — tanδ: 0.22 / 0.19 / 0.16 (20°C, 120Hz) When rated capacitance is over 1000 μ F, tanδ shall be added 0.02 to the listed value with increase of every 1000 μ F.
Endurance	After applying rated voltage with rated ripple current for 2000hrs at 105°C, the capacitors shall meet the following requirements. 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 (120Hz) Z(−25°C)/Z(20°C): 2 / 2 / 2 Z(−40°C)/Z(20°C): 3 / 3 / 3

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

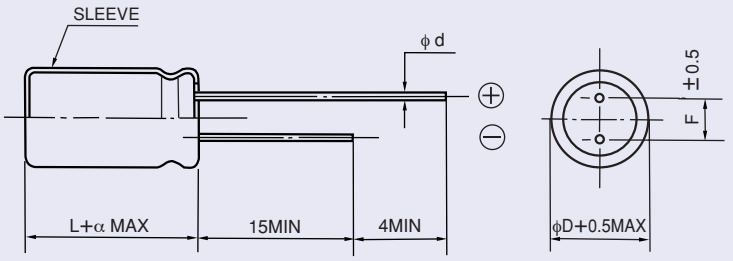
Frequency (Hz)	120	1k	10k	100k≦
Coefficient	0.50	0.80	0.90	1.00

◆PART NUMBER

□□□ Rated Voltage | MCZ Series | □□□□□ Rated Capacitance | □ Capacitance Tolerance | □□□ Option | □□ Lead Forming | D × L 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 φD × L (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR (mΩ 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 φD × L (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR (mΩ 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 φD × L (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	ESR (mΩ 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