

# CM0504FBQ1 TYPE

#### **FEATURE**

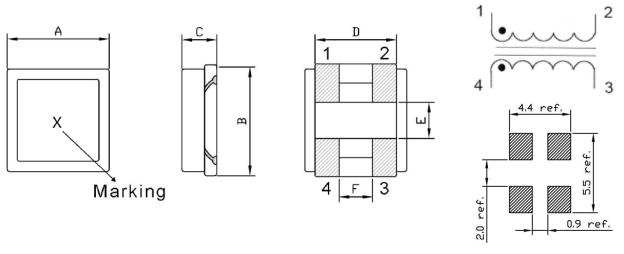
- 1. Capable of handling the highest current of any chip-type common mode filter
- 2. Noise is greatly suppressed.
- 3. AEC-Q200 Qualified

#### Applications

1. Used for power line noise suppression for any electronic devices. Used to counter adapter/battery line noise for relatively large electronic devices such as notebook, stand-alone word processor, etc.

### Shape and Dimension

### Schematics and Land Patterns(mm)



A= $4.80\pm0.30$  m/m; B= $5.00\pm0.30$  m/m; C=4.50 m/m Max; D=3.50 m/m Ref.; E=2.20 m/m Ref.; F=1.10 m/m Ref.

## Specification

Part number	Common mode Impedance Z(Ω) at 100MHz typical	DC Resistance (mΩ) ±40%	Rated Current(A)	Rated Voltage(V)	Insulation Resistance (MΩ)Min	BLACK MARKING
CM0504FBQ1-191	190	10	5.0	80	10	С
CM0504FBQ1-251	250	14	5.0	80	10	D
CM0504FBQ1-501	500	15	5.0	80	10	E
CM0504FBQ1-102	1000	16	4.5	80	10	F
CM0504FBQ1-152	1500	20	4.0	80	10	G
CM0504FBQ1-202	2000	35	3.5	80	10	J

Note1. Measurement ambient temperature of Impedance, DCR and IDC : at 25  $^{\circ}\!\mathbb{C}$ 

Note2. Packing: reel; Quantity: 1500pcs/reel



## GENERAL CHARACTERISTICS

- 1. Operating temperature range: -40 TO + 125°C (Includes temperature when the coil is heated)
- 2. High temperature exposure(storage) refer MIL-STD-202 Method 108: 1000 hrs at rated operating temperature(e.g. 125°ℂ). Part can be stored for 1000 hrs @125°ℂ. Unpowered. Measurement at 24±4 hours after test conclusion.
- 3. Temperature cycling refer JESD22 Method JA-104: 1000 cycles(-40 TO + 125°C). Measurement at 24±4 hours after test conclusion. 30 min maximum dwell time at each temp. extreme. 1 min. maximum transition time.
- 4. Biased Humidity refer MIL-STD-202 Method 103: 1000 hours 85℃/85%RH. Unpowered. Measurement at 24±4 hours after test conclusion.
- 5. Operational Life refer MIL-PRF-27: 1000 hrs. at 125 °C tested. Measurement at 24±4 hours after test conclusion.
- 6. External Visual refer MIL-STD-883 Method 2009: Inspect device construction, marking and workmanship.
- 7. Physical Dimension refer JESD22 Method JB-100: Verify physical dimensions to the applicable device detail specification.
- 8. Resistance to Solvents refer MIL-STD-202 Method 215: Add aqueous wash chemical OKEM clean or equivalent.
- 9. Mechanical Shock refer MIL-STD-202 Method 213: Figure 1 of Method 213. Condition C.
- 10. Vibration refer MIL-STD-202 Method 204: 5g;s for 20 minutes, 12 cycles each of 3 orientations. Test from 10-2000 Hz.
- 11. Resistance to soldering Heat refer MIL-STD-202 Method 210: Condition B No pre-heat of samples. Single wave solder-procedure 2 for SMD and procedure 1 for leaded with solder within 1.5mm of device body.
- 12. ESD refer AEC-Q200-002 or ISO/DIS 10605: Direct contact discharge 2kV.
- 13. Solderability refer J-STD-002: For both Leaded & SMD. Magnification 50X. Conditions: Leaded, Method A@235℃, category 3; SMD, a)Method B, 4hrs@125℃ dry heat @235℃, b)Method B@215℃ category 3., c)Method D category 3@260℃
- 14. Electrical Characterization refer spec: Show Min, Max Mean and Standard deviation at room from Min and Max temperature.
- 15. Flammability refer UL-94: V-0 or V-1 Acceptable.
- 16. Board Flex refer AEC-Q200-005: 60 sec minimum holding time.
- 17. Terminal Strength(SMD) refer AEC-Q200-006