

COMMON MODE INDUCTORS

- ECM0504F SERIES



FEATURE

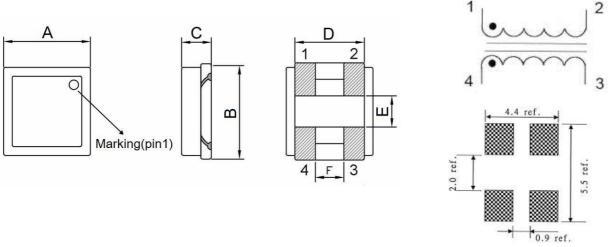
- 1. Capable of handling the highest current(up to 5A) of any chip-type common mode filter
- 2. Noise is greatly suppressed.
- 3. Same as Murata DLW5BS series

Applications

1. Used for power line noise suppression for any electroic 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)



 $A=4.80\pm0.30 \text{ m/m}$; $B=5.00\pm0.30 \text{ m/m}$; 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	DC Resistance	Rated	Rated	Insulation
	Z(Ω) at 100MHz	(mΩ)±40%	Current(A)	Voltage(V)	Resistance
	typical				(MΩ)Min
ECM0504F-191	190	10	5.0	50	10
ECM0504F-251	250	14	5.0	50	10
ECM0504F-501	500	15	5.0	50	10
ECM0504F-102	1000	16	4.5	50	10
ECM0504F-152	1500	20	4.0	50	10
ECM0504F-202	2000	35	3.5	50	10

Note1. Measurement ambient temperature of Impedance, DCR and IDC : at 25° C

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



GENERAL CHARACTERISTICS

- Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
- 2. External appearance: On visual inspection, the coil has no external defects.
- Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.

- 4. Insulating resistance: Over $100M\Omega$ at 100V D.C. between coil and core.
- 5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- 6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C degree Celsius), inductance deviation within±5.0%, after 96 hours.
- 7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
- 8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
- 9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
- 10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- 11. Storage condition: Temperature Range: 0°C ~ 35°C ; -40°C ~ 105°C (after PCB) , Humidity Range: 50% ~ 70% RH
- 12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
- 13. Reflow profile recommend:

Lead-free heat endurance test

Lead-free the recommended reflow condition

