

# Multilayer Power Inductor

## CIG10F Series (1608/ EIA 0603)

### APPLICATION

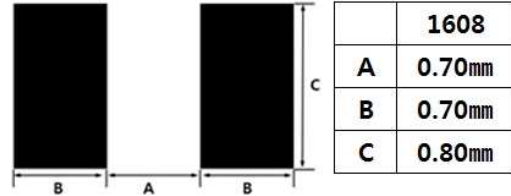
Mobile phones, DSC, DVC, PDA etc. for DC-DC Converter

### FEATURES

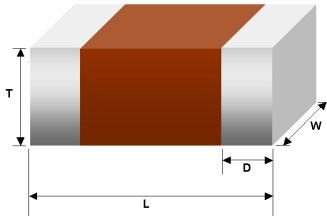
- The smallest multilayer power inductor (1.6mm×0.8mm)
- Much lower Profile than any other series (0.5mm max)
- Low DC resistance
- Magnetically shielded structure
- Free of all RoHS-regulated substances
- Monolithic structure for high reliability



### RECOMMENDED LAND PATTERN



### DIMENSION



TYPE	Dimension [mm]			
	L	W	T	D
10	1.6±0.15	0.8±0.15	0.5 max.	0.3±0.2

### DESCRIPTION

Part no.	Size (inch/mm)	Inductance ( $\mu$ H)@1MHz	DC Resistance( $\Omega$ )	Rated Current (A) Max.
CIG10FR47MNC	0603/1608	0.47±20%	0.20±30 %	0.80
CIG10F1R0MNC	0603/1608	1.0±20%	0.30±30 %	0.70
CIG10F1R5MNC	0603/1608	1.5±20%	0.35±30 %	0.60
CIG10F2R2MNC	0603/1608	2.2±20%	0.45±30 %	0.50

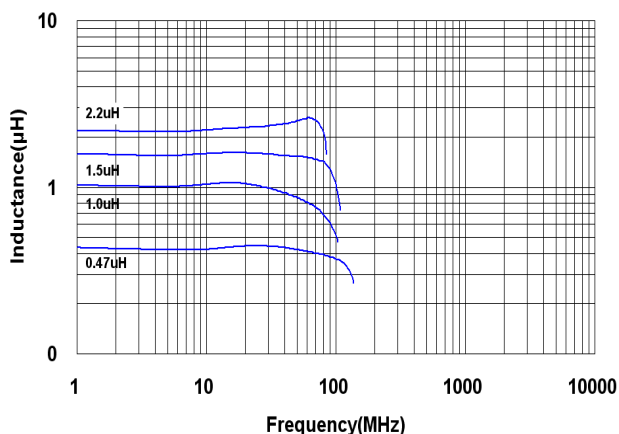
※Rated Current: DC current value when the self-generation of heat rises to 40°C (Reference ambient temperature:25°C)

※Operating temperature range: -40 to +125°C (Including self-temperature rise)

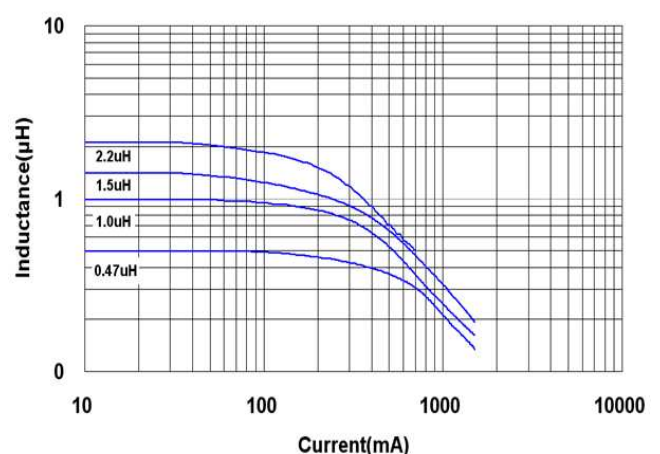
※Test equipment: Agilent :E4991A+16092A

### CHARACTERISTIC DATA

1) Frequency characteristics (Typ.)



2) DC Bias characteristics (Typ.)



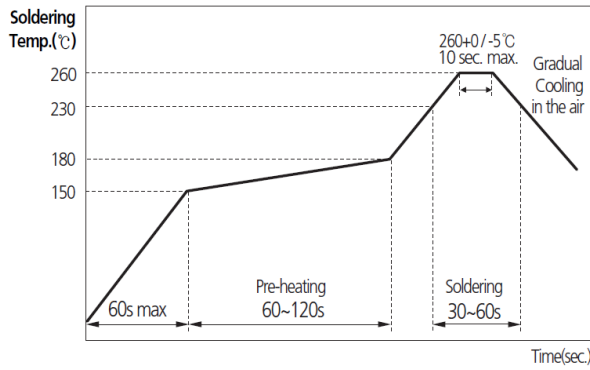
**PRODUCT IDENTIFICATION**

CI   G   10   F   2R2   M   N   C  
**(1)**   **(2)**   **(3)**   **(4)**   **(5)**   **(6)**   **(7)**   **(8)**

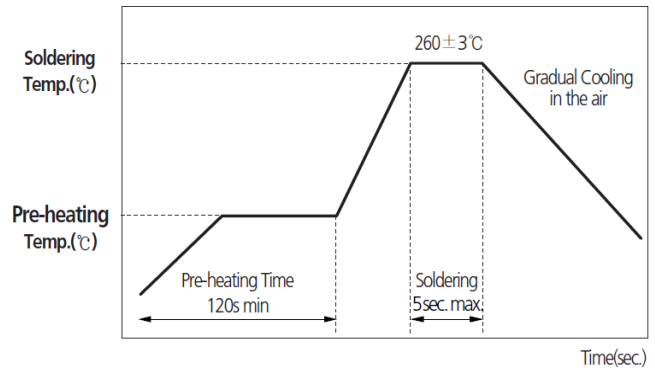
- (1) Chip Inductor
- (2) Power Inductor
- (3) Dimension
- (4) Product Series (F:Low Profile Type)
- (5) Inductance (R47:0.47uH, 2R2:2.2uH)
- (6) Tolerance (M:±20%)
- (7) Thickness option(N:Standard, A:Thinner than standard, B:Thicker than standard)
- (8) Packaging(C:paper tape, E:embossed tape)

**RECOMMENDED SOLDERING CONDITION**

**REFLOW SOLDERING**



**FLOW SOLDERING**



**PACKAGING**

Packaging Style	Quantity(pcs/reel)
Card Board Taping	4,000