

# **Metal Composite Type Power Inductor**

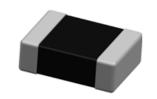
## CIGW252012GM6R8MNE(1008/2520)

### APPLICATION

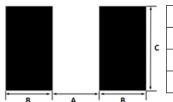
Mobile Phones, LCD & AMOLED Display, HDD, SSD etc.

### FEATURES

- High Current Type
- · Low DC resistance
- · Magnetically shielded structure
- Free of all RoHS-regulated substances
- · Monolithic structure for high reliability

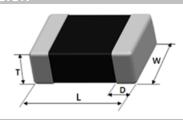


### RECOMMENDED LAND PAITERN



|  |   | 2520   |
|--|---|--------|
|  | Α | 1.60mm |
|  | В | 0.85mm |
|  | С | 2.50mm |

#### DIMENSION



| TYPE   | Dimension [mm] |         |        |           |  |  |
|--------|----------------|---------|--------|-----------|--|--|
| ITPE   | L              | W       | T      | D         |  |  |
| 252012 | 2.5±0.2        | 2.0±0.2 | 1.2max | 0.55±0.25 |  |  |

### DESCRIPTION

| Part no.           | Size      | Inductance | DC Resista | nce(mΩ) | Rated Cur | rent (A)*1 | Rated Cu | ırrent (A)*² |
|--------------------|-----------|------------|------------|---------|-----------|------------|----------|--------------|
|                    | (inch/mm) | (uH)@1MHz  | Max.       | Тур.    | Max.      | Тур.       | Max.     | Тур.         |
| CIGW252012GM6R8MNE | 1008/2520 | 6.8 ± 20%  | 300        | 250     | 1.5       | 1.7        | 1.3      | 1.5          |

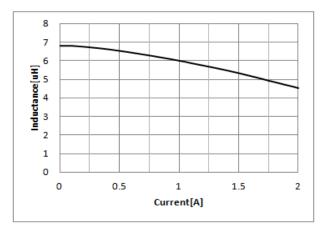
<sup>\*</sup>Rated Current (A)\*1: DC current value when Inductance drops by 30% of nominal Inductance value (ONLY REFERENCE)

#### CHARACTERISTIC DATA

### 1) Frequency characteristics (Typ.)

### 25 20 15 10 0 -5 -10 -15 -20 1 10 100 Frequency[MHz]

### 2) DC Bias characteristics (Typ.)



<sup>\*</sup>Operating temperature range: -40 to +85°C

<sup>\*</sup>Test equipment: Agilent :E4991A+16092A





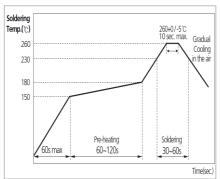
### PRODUCT IDENTIFICATION

CIG W 2520 12 GM (1) (2) (3) (4) (5)

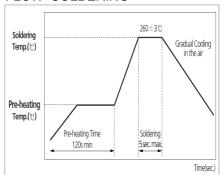
- (1) Power Inductor
- (3) Dimension (2520: 2.5mm x 2.0mm)
- (5) Remark (GM: General Metal Composite)
- (7) Inductance Tolerance Code (M: ±20%)
- (8) Initial Code
- (9) Packaging (C:paper tape, E:embossed tape)
- (2) Type (W: Winding Type)
- (4) Thickness (12: Max 1.2mm)
- (6) Inductance (6 R8: 6.8 uH)

### RECOMMENDED SOLDERING CONDITION

### REFLOW SOLDERING



### FLOW SOLDERING



### IRON SOLDERING

| Temperature of     | 280°C max. |  |
|--------------------|------------|--|
| Soldering Iron Tip |            |  |
| Preheating         | 150°Cmin.  |  |
| Temperature        | 150 VIIII. |  |
| Temperature        | ΔT≤130°C   |  |
| Differential       |            |  |
| Soldering Time     | 3sec max.  |  |
| Wattage            | 50W max.   |  |

### PACKAGING

| Packaging Style | Quantity(pcs/reel) |
|-----------------|--------------------|
| Embossed Taping | 2,500pcs           |



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The data sheets include the typical data for design reference only. If there is any question regarding the data sheets, please contact our sales personnel or application engineers.

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