

# Metal Composite Type Power Inductor

## CIGW252012GM1R0MNE(1008/2520)

### APPLICATION

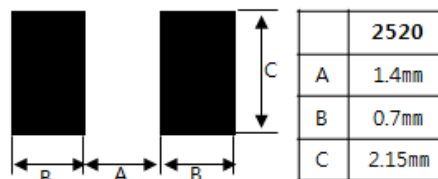
Mobile Phones, LCD & AMOLED Display, HDD, SSD etc.

### FEATURES

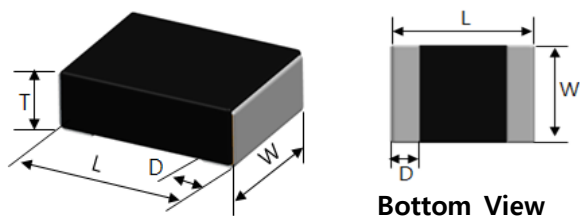
- High Current Type
- Low DC resistance
- Magnetically shielded structure
- Free of all RoHS-regulated substances
- Monolithic structure for high reliability



### RECOMMENDED LAND PATTERN



### DIMENSION



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

### DESCRIPTION

Part no.	Size (inch/mm)	Inductance (uH)@1MHz	DC Resistance(mΩ)		Rated Current (A) <sup>*1</sup>		Rated Current (A) <sup>*2</sup>	
			Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW252012GM1R0MLE	1008/2520	1.0 ± 20%	46	37	4.0	4.4	3.4	3.7

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

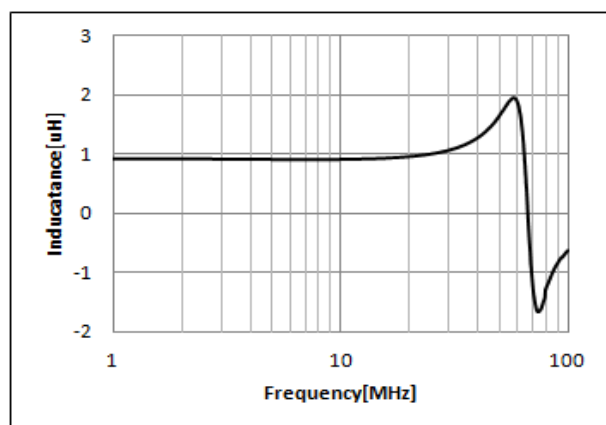
※Rated Current (A)<sup>\*2</sup>: DC current value when the self-generation of heat rises to 40℃ (Reference ambient temperature:25℃)

※Operating temperature range: -40 to +85℃

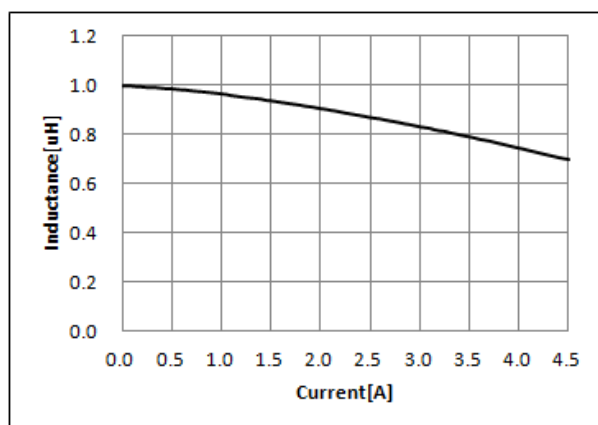
※Test equipment: Agilent :E4991A+16092A

### CHARACTERISTIC DATA

#### 1) Frequency characteristics (Typ.)



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



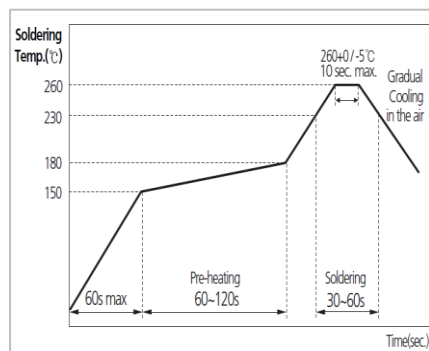
PRODUCT IDENTIFICATION

**CIG W 2520 12 GM 1R0 M N E**  
**(1) (2) (3) (4) (5) (6) (7) (8) (9)**

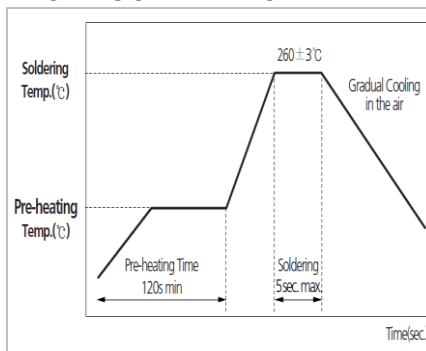
- |  |                               |
|--|-------------------------------|
| (1) Power Inductor                           | (2) Type (W: Winding Type)    |
| (3) Dimension (2520: 2.5mm x 2.0mm)          | (4) Thickness (12: Max 1.2mm) |
| (5) Remark (GM: General Metal Composite)     | (6) Inductance (1R0: 1.0uH)   |
| (7) Inductance Tolerance Code (M: ±20%)      |                               |
| (8) Initial Code                             |                               |
| (9) Packaging(C:paper tape, E:embossed tape) |                               |

RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



FLOW SOLDERING



IRON SOLDERING

Temperature of Soldering Iron Tip	280 °C max.
Preheating Temperature	150 °C min.
Temperature Differential	$\Delta T \leq 130 ^\circ\text{C}$
Soldering Time	3sec max.
Wattage	50W max.

PACKAGING

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



Any data in this sheet are subject to change, modify or discontinue without notice.

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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