



# THE DATASHEET OF GLFR2012T4R7M-LR



# SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

## GLFR Series GLFR2012

### FEATURES

- It delivers low Rdc with high I<sub>dc</sub>.
- It is lead-free compatible.  
The product contains no lead whatsoever.  
It is able to withstand high temperature reflows (260°C during the peak) used in lead-free soldering.
- It's construction supports bulk mounting.

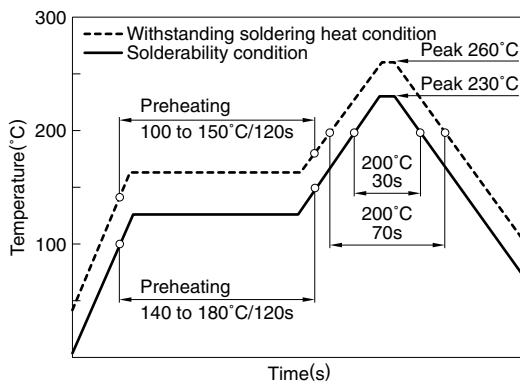
### APPLICATIONS

Portable audio visual devices (DSCs, DVCs, etc.)  
Mobile communication devices (cellular phones, etc.)  
Information devices (PCs, etc.)

### SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Operating temperature range | -40 to +105°C<br>[Including self-temperature rise] |
| Storage temperature range   | -40 to +105°C                                      |

### RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERING



### PRODUCT IDENTIFICATION

|      |      |     |     |     |     |
|------|------|-----|-----|-----|-----|
| GLFR | 2012 | T   | 100 | M   | -LR |
| (1)  | (2)  | (3) | (4) | (5) | (6) |

(1) Series name

(2) Dimensions

|      |            |
|------|------------|
| 2012 | 2.0×1.25mm |
|------|------------|

(3) Packaging style

|   |        |
|---|--------|
| T | Taping |
|---|--------|

(4) Inductance

|     |       |
|-----|-------|
| 1R0 | 1μH   |
| 100 | 10μH  |
| 101 | 100μH |

(5) Inductance tolerance

|   |      |
|---|------|
| M | ±20% |
|---|------|

(6) TDK internal code

### PACKAGING STYLE AND QUANTITIES

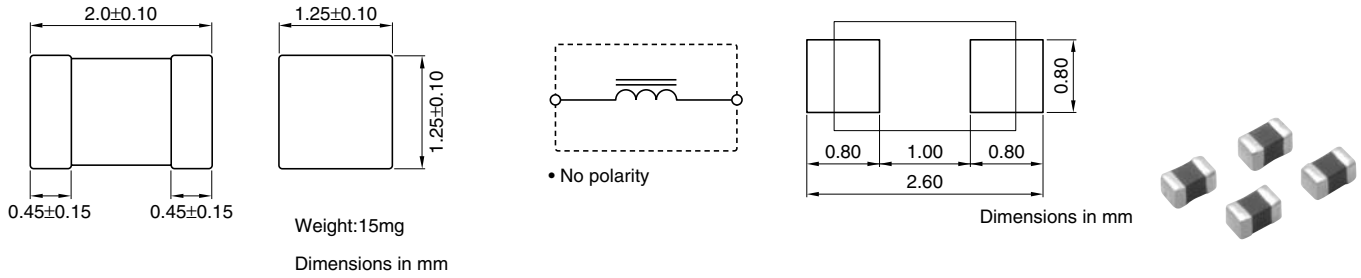
|                 |                  |
|-----------------|------------------|
| Packaging style | Quantity         |
| Taping          | 2000 pieces/reel |

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• Please contact our Sales office when your application are considered the following:  
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

• All specifications are subject to change without notice.

## SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



## ELECTRICAL CHARACTERISTICS

| Inductance (μH) | Inductance tolerance (%) | DC resistance (Ω)±30% | Rated current*1 (mA)max. | Rated current*2 (mA)max. | Rated current*3 (mA)max. | Part No.         |
|-----------------|--------------------------|-----------------------|--------------------------|--------------------------|--------------------------|------------------|
| 1               | ±20                      | 0.058                 | 300                      | 550                      | 1150                     | GLFR2012T1R0M-LR |
| 1.5             | ±20                      | 0.084                 | 260                      | 450                      | 950                      | GLFR2012T1R5M-LR |
| 2.2             | ±20                      | 0.088                 | 240                      | 400                      | 900                      | GLFR2012T2R2M-LR |
| 3.3             | ±20                      | 0.18                  | 190                      | 300                      | 700                      | GLFR2012T3R3M-LR |
| 4.7             | ±20                      | 0.2                   | 140                      | 280                      | 600                      | GLFR2012T4R7M-LR |
| 6.8             | ±20                      | 0.27                  | 120                      | 200                      | 550                      | GLFR2012T6R8M-LR |
| 10              | ±20                      | 0.3                   | 100                      | 180                      | 500                      | GLFR2012T100M-LR |
| 15              | ±20                      | 0.5                   | 85                       | 140                      | 400                      | GLFR2012T150M-LR |
| 22              | ±20                      | 0.7                   | 75                       | 110                      | 300                      | GLFR2012T220M-LR |
| 33              | ±20                      | 1.2                   | 65                       | 95                       | 250                      | GLFR2012T330M-LR |
| 47              | ±20                      | 1.38                  | 50                       | 85                       | 230                      | GLFR2012T470M-LR |
| 68              | ±20                      | 2.1                   | 40                       | 70                       | 180                      | GLFR2012T680M-LR |
| 100             | ±20                      | 3                     | 30                       | 60                       | 160                      | GLFR2012T101M-LR |

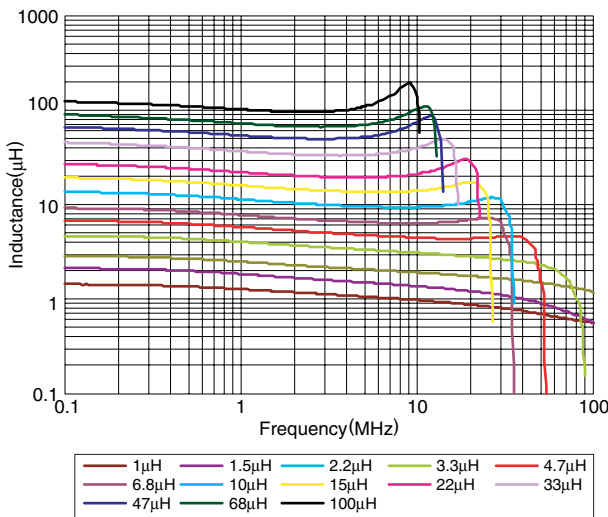
\*1 Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

\*2 Rated current based on inductance variation: Current when inductance decreases by 30% of the initial value due to direct current superimposed characteristics

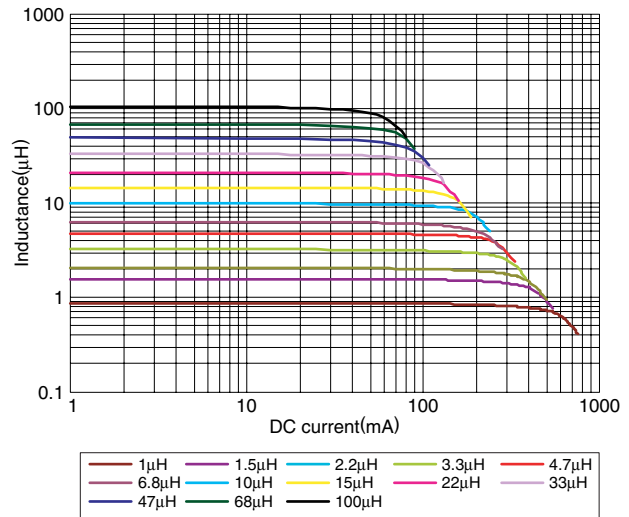
\*3 Rated current based on increasing product temperature: Current when temperature of the product reaches +20°C

## TYPICAL ELECTRICAL CHARACTERISTICS

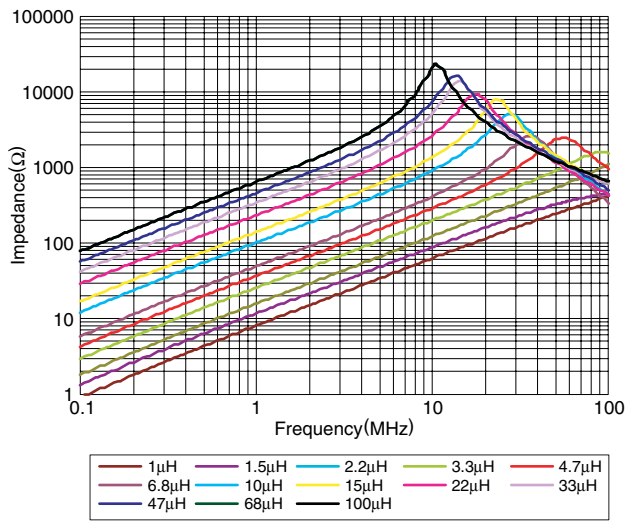
### INDUCTANCE vs. FREQUENCY CHARACTERISTICS



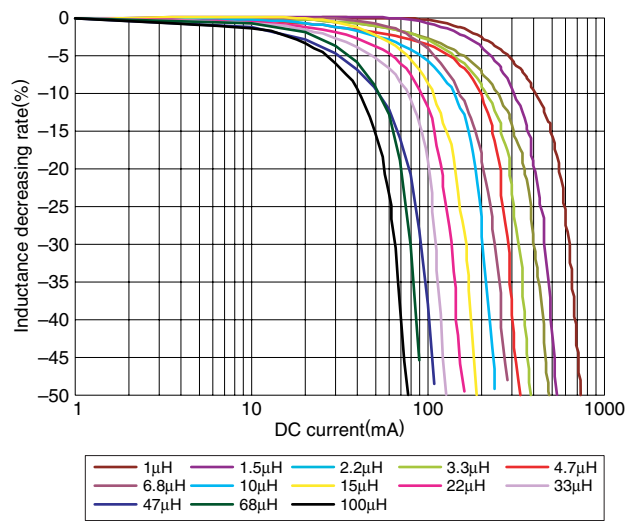
### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE



• All specifications are subject to change without notice.

## Looking for pricing, stock, or lifecycle information?

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- ⊖ [TDK Corporation](#) Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management