

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

Conformity to RoHS Directive

GLFR Series GLFR1608

FEATURES

- It delivers low Rdc with high Idc.
- 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 is a product conforming to RoHS directive.
- It's construction supports bulk mounting.

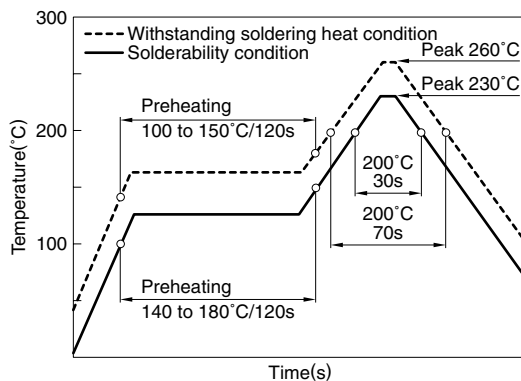
APPLICATIONS

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

RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERING



PRODUCT IDENTIFICATION

| | | | | | |
|------|------|-----|-----|-----|------|
| GLFR | 1608 | T | 100 | M | - LR |
| (1) | (2) | (3) | (4) | (5) | (6) |

(1) Series name

(2) Dimensions

| | |
|------|-----------|
| 1608 | 1.6×0.8mm |
|------|-----------|

(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

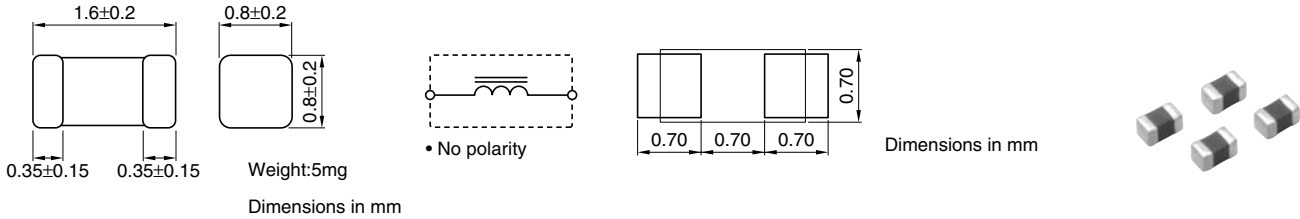
| | |
|-----------------|------------------|
| Packaging style | Quantity |
| Taping | 4000 pieces/reel |

• 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. |
|-----------------|--------------------------|-----------------------|--------------------------|--------------------------|--------------------------|------------------|
| 0.35 | ±20 | 0.04 | 330 | 500 | 1200 | GLFR1608TR35M-LR |
| 0.47 | ±20 | 0.05 | 300 | 475 | 1100 | GLFR1608TR47M-LR |
| 0.55 | ±20 | 0.05 | 250 | 400 | 1100 | GLFR1608TR55M-LR |
| 1 | ±20 | 0.08 | 230 | 360 | 900 | GLFR1608T1R0M-LR |
| 1.5 | ±20 | 0.15 | 170 | 260 | 625 | GLFR1608T1R5M-LR |
| 2.2 | ±20 | 0.17 | 160 | 240 | 600 | GLFR1608T2R2M-LR |
| 3.3 | ±20 | 0.23 | 120 | 190 | 525 | GLFR1608T3R3M-LR |
| 4.7 | ±20 | 0.24 | 110 | 170 | 500 | GLFR1608T4R7M-LR |
| 6.8 | ±20 | 0.35 | 90 | 135 | 400 | GLFR1608T6R8M-LR |
| 10 | ±20 | 0.36 | 80 | 120 | 400 | GLFR1608T100M-LR |
| 15 | ±20 | 0.9 | 55 | 75 | 220 | GLFR1608T150M-LR |
| 22 | ±20 | 1 | 50 | 70 | 200 | GLFR1608T220M-LR |
| 33 | ±20 | 2.2 | 40 | 60 | 120 | GLFR1608T330M-LR |
| 47 | ±20 | 2.3 | 35 | 50 | 100 | GLFR1608T470M-LR |
| 68 | ±20 | 4 | 20 | 35 | 90 | GLFR1608T680M-LR |
| 100 | ±20 | 5.5 | 15 | 25 | 80 | GLFR1608T101M-LR |

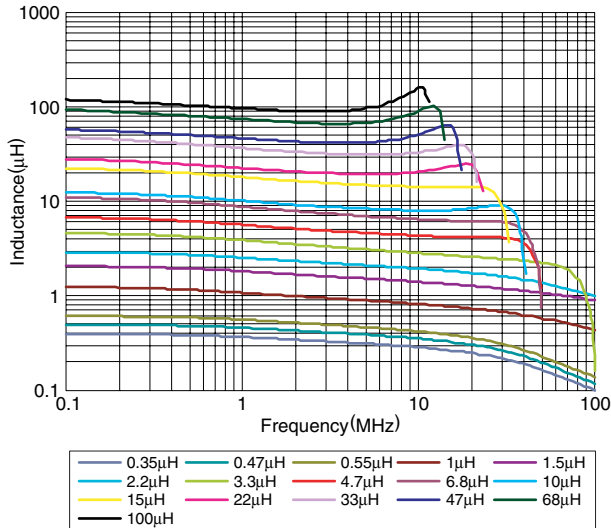
*1 Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

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

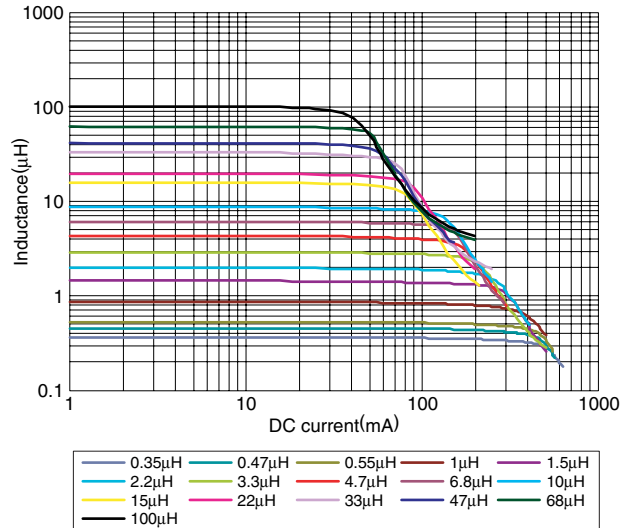
*3 Rated current based on increasing product temperature: Current when temperature of the product reaches +20°C

TYPICAL ELECTRICAL CHARACTERISTICS

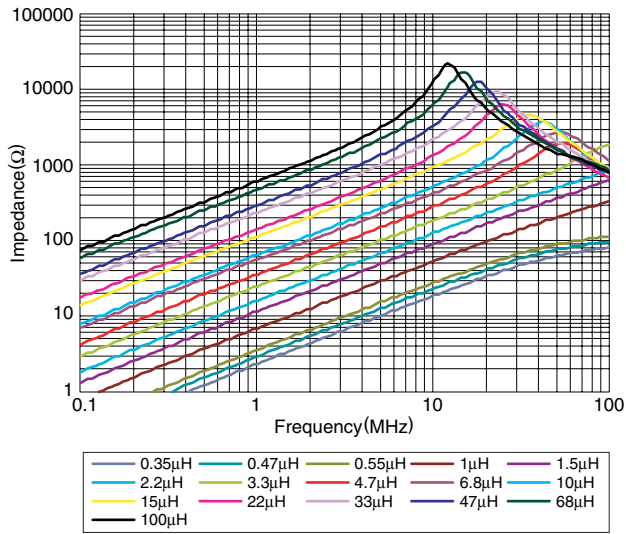
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



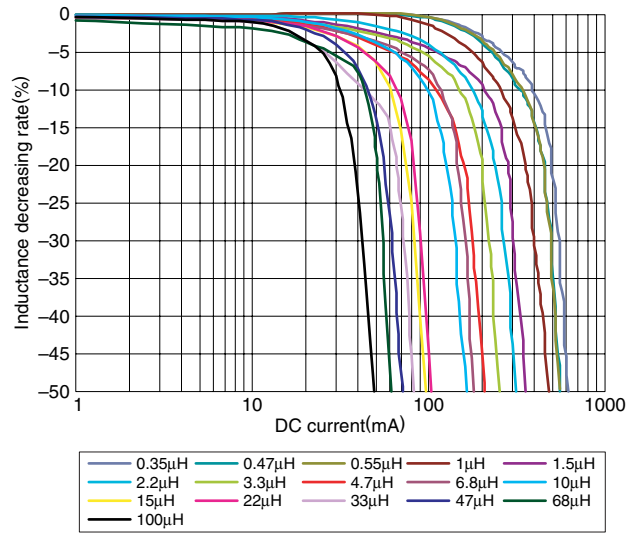
INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE



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