

# 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.

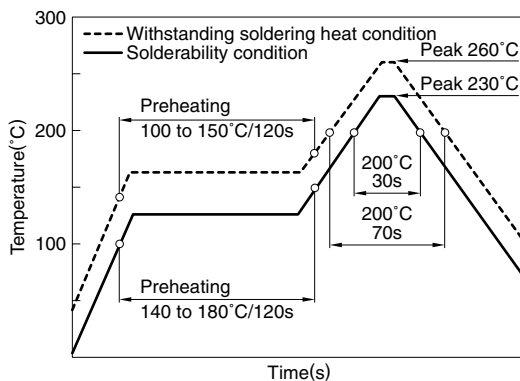
### APPLICATIONS

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
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(3) Packaging style

T	Taping
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(4) Inductance

1R0	1μH
100	10μH
101	100μH

(5) Inductance tolerance

M	±20%
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(6) TDK internal code

### PACKAGING STYLE AND QUANTITIES

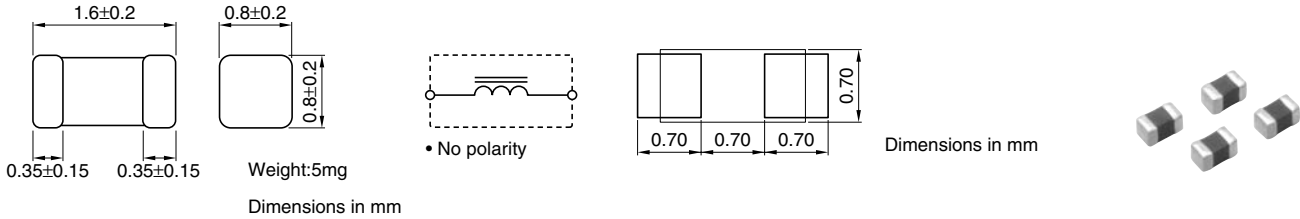
Packaging style	Quantity
Taping	4000 pieces/reel

• 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

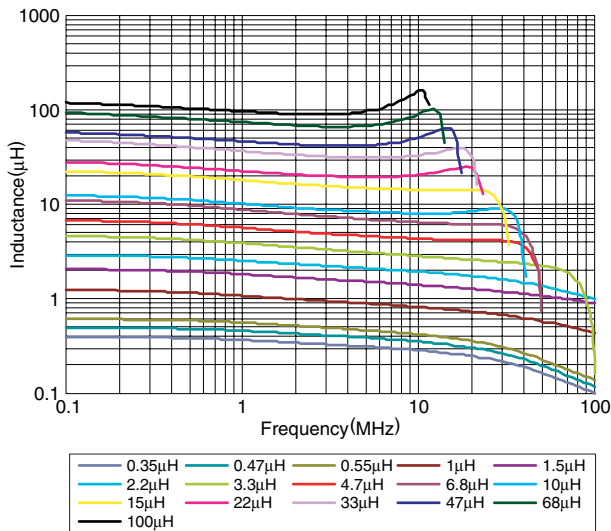
\*1 Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

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

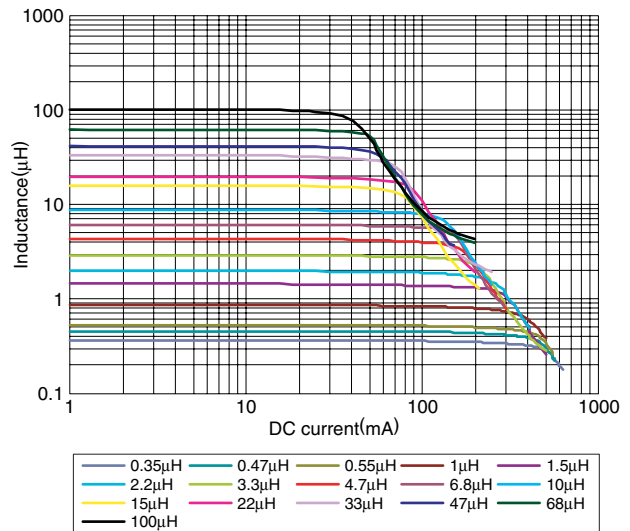
\*3 Rated current based on increasing product temperature: Current when temperature of the product reaches +20°C

### TYPICAL ELECTRICAL CHARACTERISTICS

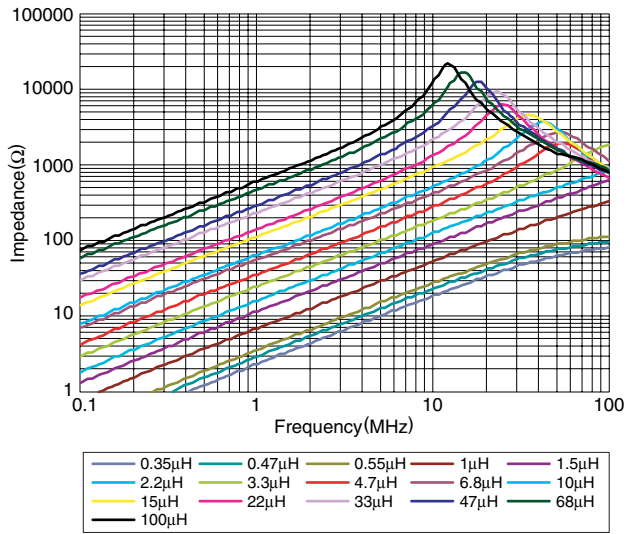
#### INDUCTANCE vs. FREQUENCY CHARACTERISTICS



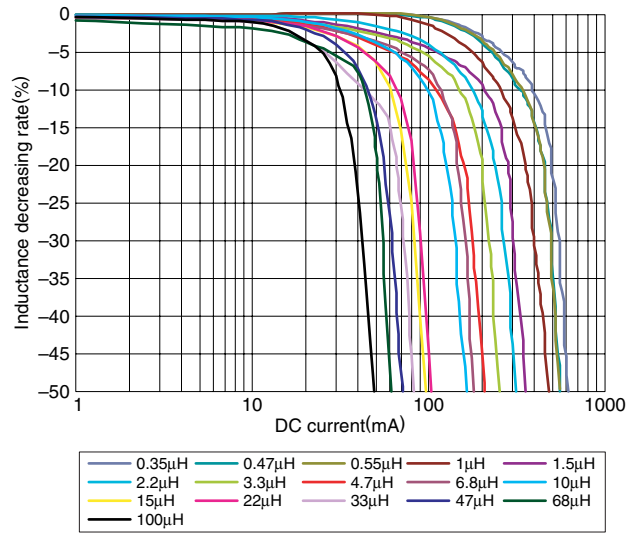
#### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE



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