

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

Conformity to RoHS Directive

## GLCR Series GLCR2012

### 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's construction supports bulk mounting.

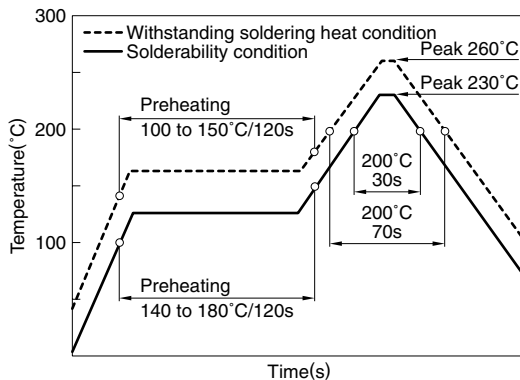
### APPLICATIONS

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

GLCR	2012	T	100	M	- HC
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

2012	2.0×1.25mm
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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

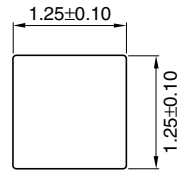
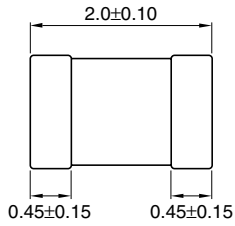
Packaging style	Quantity
Taping	2000 pieces/reel

• 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.)

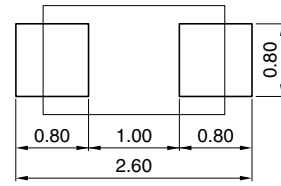
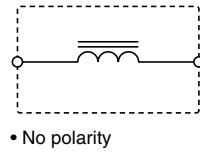
• All specifications are subject to change without notice.

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

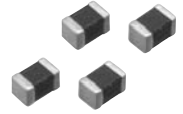


Weight: 15mg

Dimensions in mm



Dimensions in mm



## ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance (%)	DC resistance (Ω)±30%	Rated current* <sup>1</sup> (mA)max.	Rated current* <sup>2</sup> (mA)max.	Rated current* <sup>3</sup> (mA)max.	Part No.
1	±20	0.09	490	850	900	GLCR2012T1R0M-HC
1.5	±20	0.18	380	700	700	GLCR2012T1R5M-HC
2.2	±20	0.2	375	550	600	GLCR2012T2R2M-HC
3.3	±20	0.27	285	470	550	GLCR2012T3R3M-HC
4.7	±20	0.29	225	420	500	GLCR2012T4R7M-HC
6.8	±20	0.4	200	350	440	GLCR2012T6R8M-HC
10	±20	0.5	155	270	380	GLCR2012T100M-HC
15	±20	0.75	130	230	320	GLCR2012T150M-HC
22	±20	1	105	180	250	GLCR2012T220M-HC
33	±20	1.7	85	140	200	GLCR2012T330M-HC
47	±20	2.4	70	120	170	GLCR2012T470M-HC
68	±20	3	55	100	150	GLCR2012T680M-HC
100	±20	4.5	40	85	130	GLCR2012T101M-HC

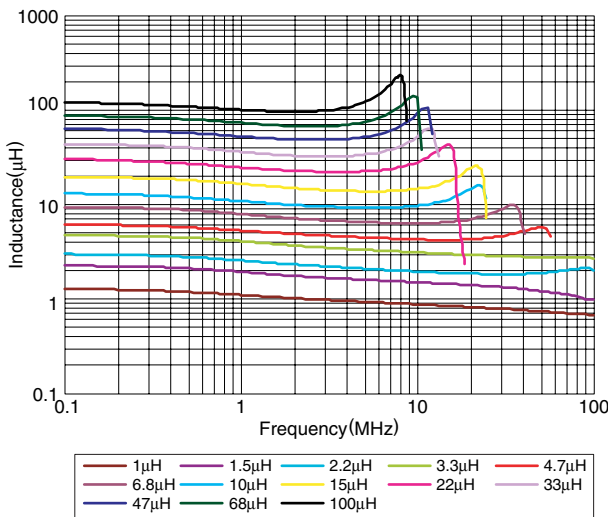
\*<sup>1</sup> Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

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

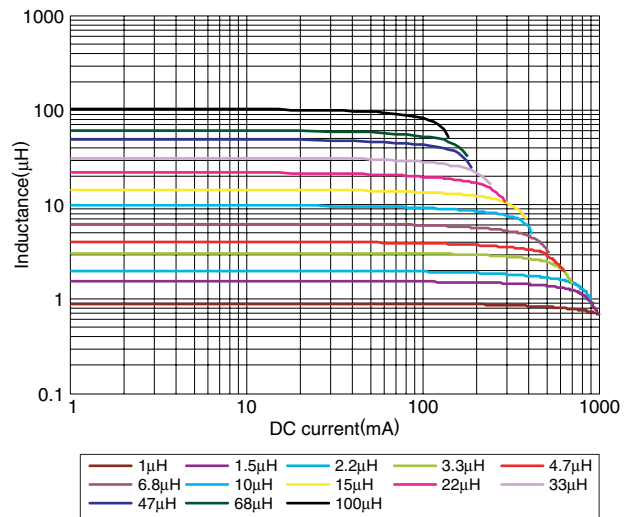
\*<sup>3</sup> Rated current based on increasing product temperature: Current when temperature of the product reaches +20°C

## TYPICAL ELECTRICAL CHARACTERISTICS

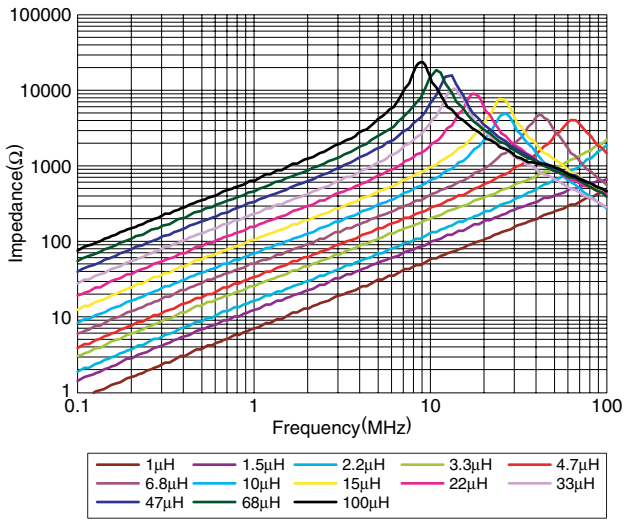
### INDUCTANCE vs. FREQUENCY CHARACTERISTICS



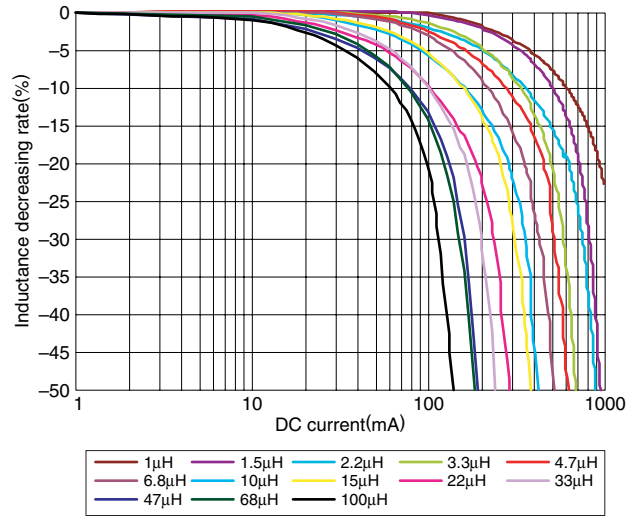
### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE



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