



# 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.

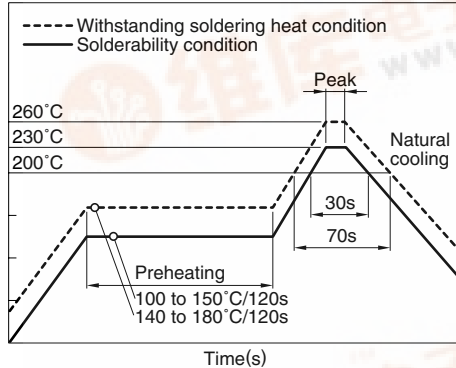
### APPLICATIONS

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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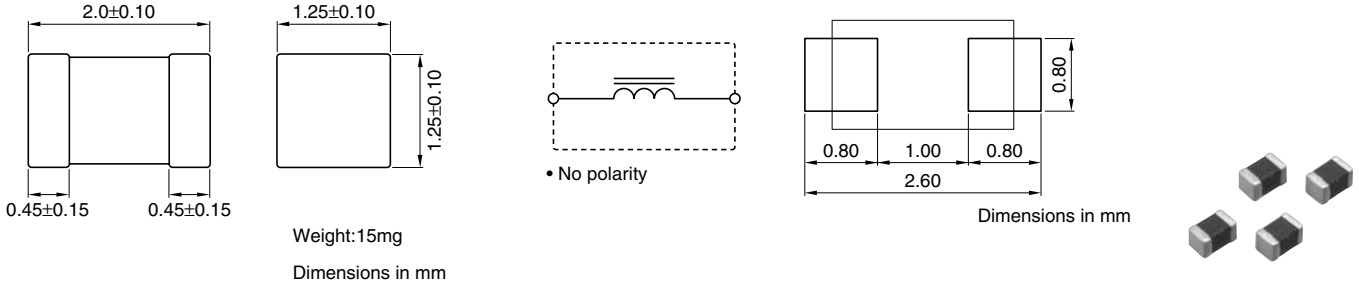
(6) TDK internal code

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel



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



### ELECTRICAL CHARACTERISTICS

Inductance ( $\mu\text{H}$ )	Inductance tolerance (%)	DC resistance ( $\Omega$ ) $\pm 30\%$	Rated current*1 (mA)max.	Rated current*2 (mA)max.	Rated current*3 (mA)max.	Part No.
1	$\pm 20$	0.09	490	850	900	GLCR2012T1R0M-HC
2.2	$\pm 20$	0.2	350	550	600	GLCR2012T2R2M-HC
4.7	$\pm 20$	0.29	225	420	500	GLCR2012T4R7M-HC
10	$\pm 20$	0.5	155	270	380	GLCR2012T100M-HC
22	$\pm 20$	1	105	180	250	GLCR2012T220M-HC
47	$\pm 20$	2.4	70	120	170	GLCR2012T470M-HC
100	$\pm 20$	4.5	40	85	130	GLCR2012T101M-HC

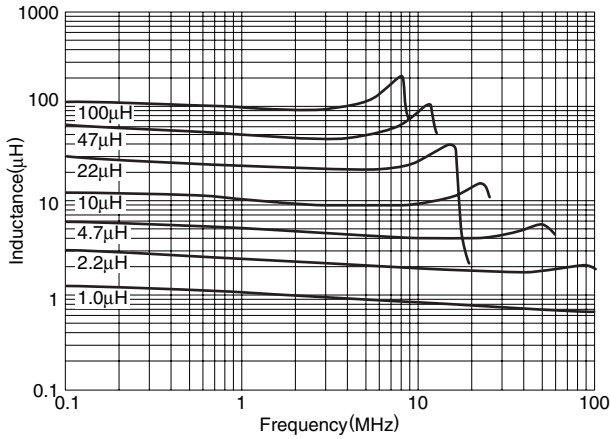
\*1 Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

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

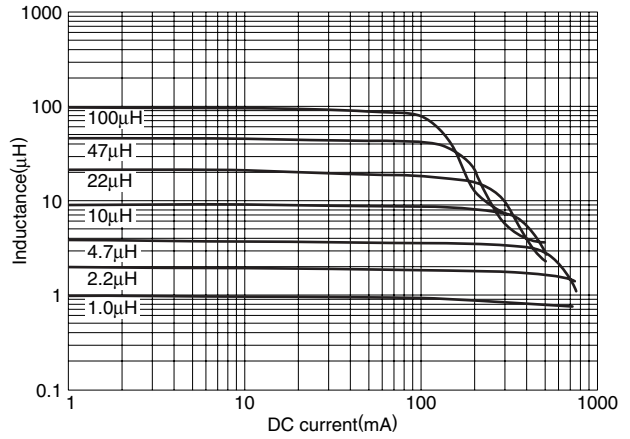
\*3 Rated current based on increasing product temperature: Current when temperature of the product reaches +20°C

### TYPICAL ELECTRICAL CHARACTERISTICS

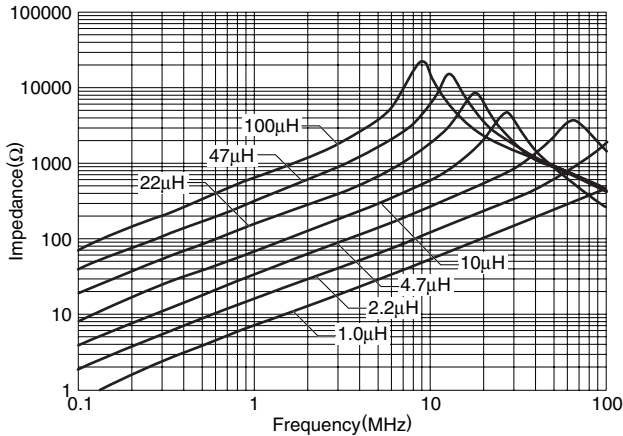
#### INDUCTANCE vs. FREQUENCY CHARACTERISTICS



#### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



#### IMPEDANCE vs. FREQUENCY CHARACTERISTICS



#### DC SUPERPOSITION VS. INDUCTANCE DECREASING RATE

