TDK

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

Conformity to RoHS Directive

GLFR Series GLFR2012

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.

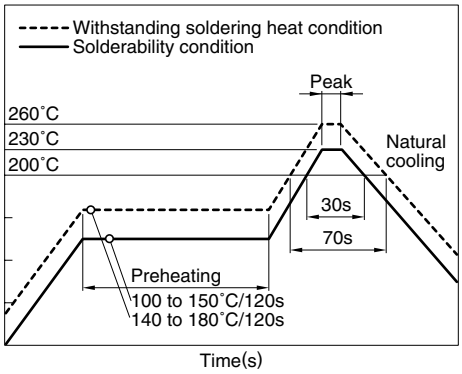
APPLICATIONS

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

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%

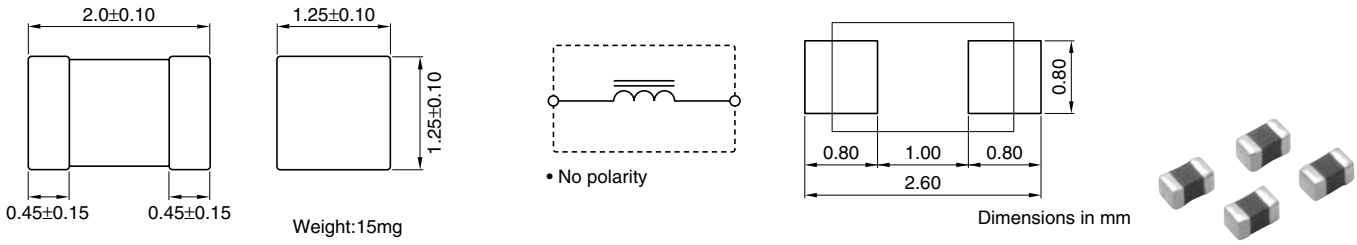
(6) TDK internal code

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.

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*1 (mA)max.	Rated current*2 (mA)max.	Rated current*3 (mA)max.	Part No.
1	±20	0.058	300	550	1150	GLFR2012T1R0M-LR
2.2	±20	0.088	240	400	900	GLFR2012T2R2M-LR
4.7	±20	0.2	140	280	600	GLFR2012T4R7M-LR
10	±20	0.3	100	180	500	GLFR2012T100M-LR
22	±20	0.7	75	110	300	GLFR2012T220M-LR
47	±20	1.38	50	85	230	GLFR2012T470M-LR
100	±20	3	30	60	160	GLFR2012T101M-LR

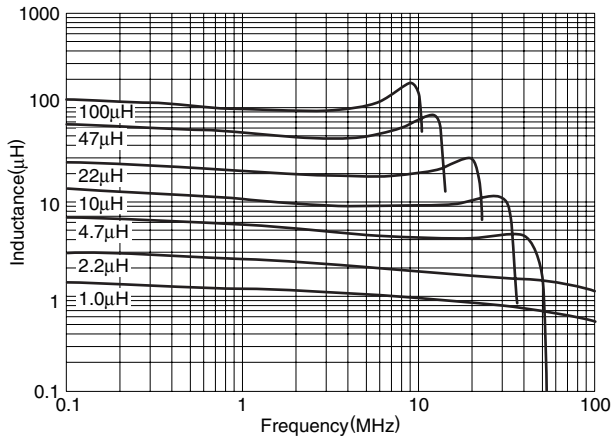
*1 Rated current based on inductance variation: Current when inductance decreases by 10% of the initial value due to direct current superimposed characteristics

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

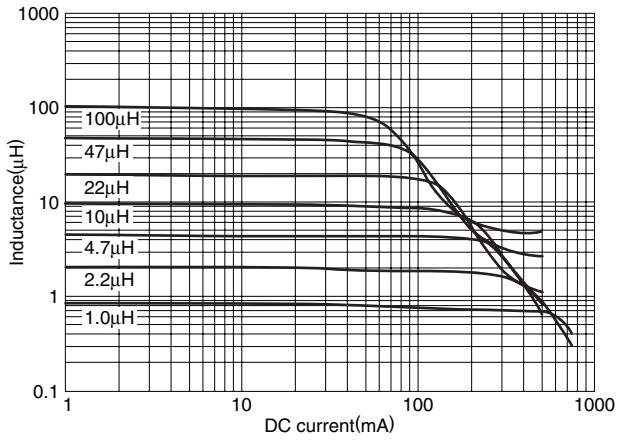
*3 Rated current based on increasing product temperature: Current when temperature of the product reaches +20°C

TYPICAL ELECTRICAL CHARACTERISTICS

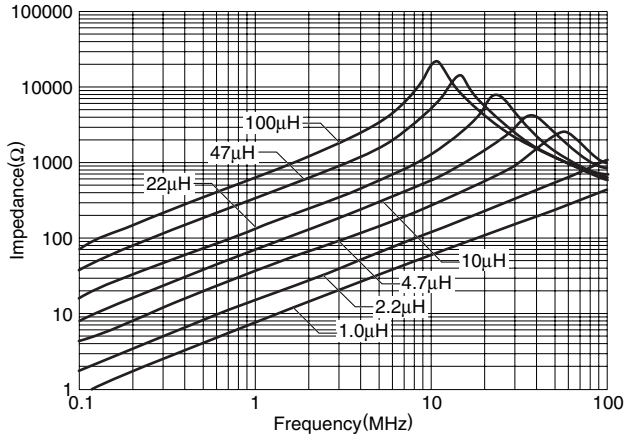
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



DC SUPERPOSITION VS. INDUCTANCE DECREASING RATE