TDK

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

Conformity to RoHS Directive

SLF Series SLF6028

FEATURES

- The SLF series are characterized by low profile, low DC resistance, and high current handling capacities.
- Because they are magnetically shielded, these parts can be used in high-density mounting configurations.
- Flat bottom surface ensures secure, reliable mounting.
- Provided in embossed carrier tape packaging for use with automatic mounting machines.

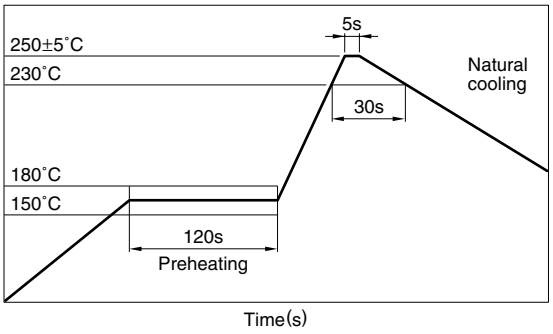
APPLICATIONS

Portable telephones, personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

Operating temperature range	–20 to +85°C [Including self-temperature rise]
Storage temperature range	–40 to +85°C[Unit of products]

RECOMMENDED REFLOW SOLDERING CONDITIONS



PRODUCT IDENTIFICATION

SLF	6028	T-	4R7	M	1R6	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

6028	6.0×6.0×2.8mm (L×W×T)

(3) Packaging style

T	Taping(reel)

(4) Inductance value

4R7	4.7µH
100	10µH

(5) Inductance tolerance

M	±20%

(6) Rated current

1R6	1.6A
R77	0.77A

(7) Lead-free compatible product

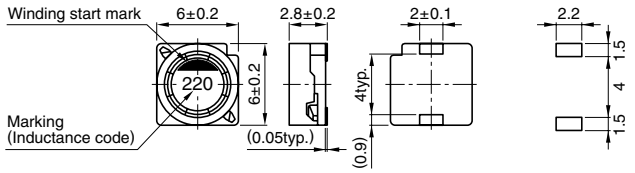
PF	Lead-free compatible product

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	1000 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/RECOMMENDED PC BOARD PATTERN



Weight: 0.3g typ.

Dimensions in mm

ELECTRICAL CHARACTERISTICS

Inductance (µH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)*		Part No.
				Based on inductance change	Based on temperature rise	
4.7	±20%	100	0.0284	1.6max.	2.5typ.	SLF6028T-4R7M1R6-PF
6.8	±20%	100	0.0354	1.5max.	2.2typ.	SLF6028T-6R8M1R5-PF
10	±20%	100	0.0532	1.3max.	1.8typ.	SLF6028T-100M1R3-PF
15	±20%	100	0.0745	1max.	1.4typ.	SLF6028T-150M1R0-PF
22	±20%	100	0.104	0.77max.	1.3typ.	SLF6028T-220MR77-PF
33	±20%	100	0.148	0.69max.	1.1typ.	SLF6028T-330MR69-PF
47	±20%	100	0.21	0.59max.	0.92typ.	SLF6028T-470MR59-PF
68	±20%	100	0.29	0.5max.	0.78typ.	SLF6028T-680MR50-PF
100	±20%	100	0.43	0.42max.	0.64typ.	SLF6028T-101MR42-PF
150	±20%	100	0.65	0.34max.	0.5typ.	SLF6028T-151MR34-PF
220	±20%	100	0.98	0.26max.	0.38typ.	SLF6028T-221MR26-PF

* Rated current: Value obtained when current flows and the temperature has risen to 25°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.

- Test equipment L: 4194A IMPEDANCE/GAIN-PHASE ANALYZER HP, or equivalent (Test frequency: 100kHz/0.5V)
  Rdc: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS