TDK

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

Conformity to RoHS Directive

SLF Series SLF12555

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.

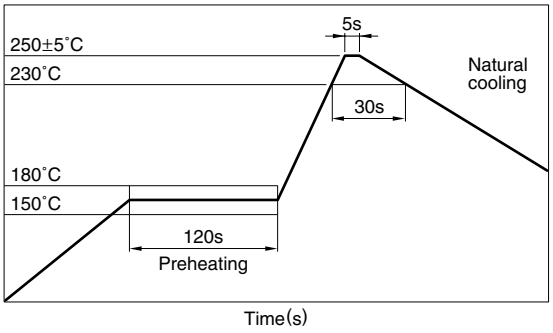
APPLICATIONS

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

SPECIFICATIONS

Operating temperature range	–20 to +90°C [Including self-temperature rise]
Storage temperature range	–40 to +90°C[Unit of products]

RECOMMENDED REFLOW SOLDERING CONDITIONS



PRODUCT IDENTIFICATION

SLF	12555	T-	220	M	2R3	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

12555	12.5×12.5×5.5mm (L×W×T)

(3) Packaging style

T	Taping(reel)

(4) Inductance value

6R0	6µH
100	10µH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R9	1.9A
R88	0.88A

(7) Lead-free compatible product

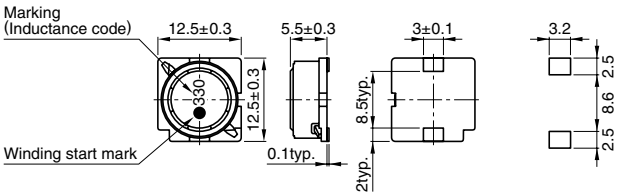
PF	Lead-free compatible product

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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: 2.6g

Dimensions in mm

ELECTRICAL CHARACTERISTICS

Inductance (µH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
6	±30%	1	0.0164	3.6	4.9	SLF12555T-6R0N3R6-PF
10	±20%	1	0.0215	3.4	4.3	SLF12555T-100M3R4-PF
15	±20%	1	0.0259	2.8	3.9	SLF12555T-150M2R8-PF
22	±20%	1	0.0338	2.3	3.4	SLF12555T-220M2R3-PF
33	±20%	1	0.0415	1.9	3.1	SLF12555T-330M1R9-PF
47	±20%	1	0.0618	1.6	2.5	SLF12555T-470M1R6-PF
68	±20%	1	0.0832	1.3	2.2	SLF12555T-680M1R3-PF
100	±20%	1	0.117	1.1	1.8	SLF12555T-101M1R1-PF
150	±20%	1	0.19	0.88	1.4	SLF12555T-151MR88-PF
220	±20%	1	0.27	0.72	1.2	SLF12555T-221MR72-PF
330	±20%	1	0.41	0.59	1	SLF12555T-331MR59-PF
470	±20%	1	0.52	0.49	0.88	SLF12555T-471MR49-PF
680	±20%	1	0.76	0.43	0.73	SLF12555T-681MR43-PF
1000	±20%	1	1.12	0.34	0.6	SLF12555T-102MR34-PF
1500	±20%	1	1.73	0.29	0.48	SLF12555T-152MR29-PF

* Rated current: Value obtained when current flows and the temperature has risen to 30°C or when DC current flows and the nominal value of inductance has fallen by 10%, whichever is smaller.

- Test equipment L: 4194A IMPEDANCE/GAIN-PHASE ANALYZER HP, or equivalent (Measured at 1kHz/0.5V)
  Rdc:MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS