# Inductors For Power Line

SMD

## 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.

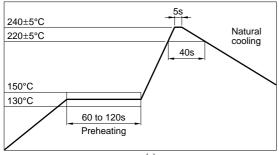
## APPLICATIONS

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

#### SPECIFICATIONS

	Operating temperature	Storage temperature
Туре	range	range
	[Including self-temperature rise]	[Unit of products]
SLF6025	–20 to +85°C	–40 to +85°C
SLF6028	–20 to +85°C	–40 to +85°C
SLF7028	–20 to +85°C	–40 to +85°C
SLF7030	–20 to +85°C	–40 to +85°C
SLF7032	–20 to +85°C	–40 to +85°C
SLF7045	–20 to +85°C	–40 to +85°C
SLF10145	–20 to +90°C	-40 to +90°C
SLF12555	–20 to +90°C	–40 to +90°C
SLF12565	–20 to +105°C	-40 to +105°C
SLF12575	–20 to +105°C	-40 to +105°C

## RECOMMENDED REFLOW SOLDERING CONDITIONS



Time(s)

# PRODUCT IDENTIFICATION

			• • • • •	••••		
SLF	7032	Т-	220	М	R96	-2
(1)	(2)	(3)	(4)	(5)	(6)	(7)

SLF Series SLF12555 Type

(1) Series name

(2) Dimensions L×W×T

6025	6.0×6.0×2.5mm
6028	6.0×6.0×2.8mm
7028	7.0×7.0×2.8mm
7030	7.0×7.0×3.0mm
7032	7.0×7.0×3.2mm
7045	7.0×7.0×4.5mm
10145	10.1×10.1×4.5mm
12555	12.5×12.5×5.5mm
12565	12.5×12.5×6.5mm
12575	12.5×12.5×7.5mm

#### (3) Packaging style

#### (4) Inductance value

,		
3R3	3.3µH	
100	10µH	

(5) Inductance tolerance

	000/	
IVI	±20%	
N	±30%	

#### (6) Rated current

. ,		
1R9	1.9A	
R96	0.96A	

## (7) TDK internal code

(Some products may not have this number. See the main body for details.)

## PACKAGING STYLE AND QUANTITIES

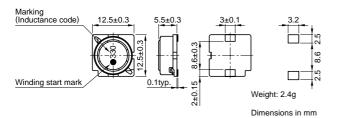
Packaging style	Туре	Quantity
Taping	SLF6025T	1000 pieces/reel
	SLF6028T	1000 pieces/reel
	SLF7028T	1000 pieces/reel
	SLF7030T	1000 pieces/reel
	SLF7032T	1000 pieces/reel
	SLF7045T	1000 pieces/reel
	SLF10145T	500 pieces/reel
	SLF12555T	500 pieces/reel
	SLF12565T	500 pieces/reel
	SLF12575T	500 pieces/reel

# Inductors

## SLF Series SLF12555 Type

For Power Line SMD

## SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



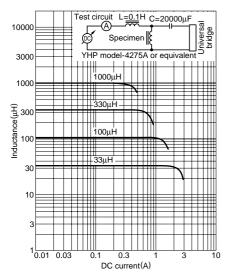
## **ELECTRICAL CHARACTERISTICS**

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

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

 Test equipment L:YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER, 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



531\_SLF12555 990803

