

# Inductors

## For Power Line SMD

## SLF Series SLF6028 Type

### 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.

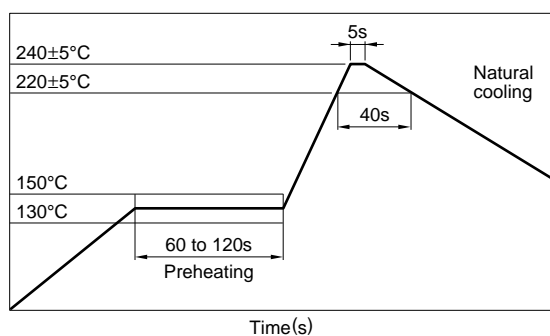
### APPLICATIONS

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

### SPECIFICATIONS

Type	Operating temperature range [Including self-temperature rise]	Storage temperature range [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



### PRODUCT IDENTIFICATION

SLF	7032	T	220	M	R96	-2
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(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

T	Taping(reel)
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(4) Inductance value

3R3	3.3μH
100	10μH

(5) Inductance tolerance

M	±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.)

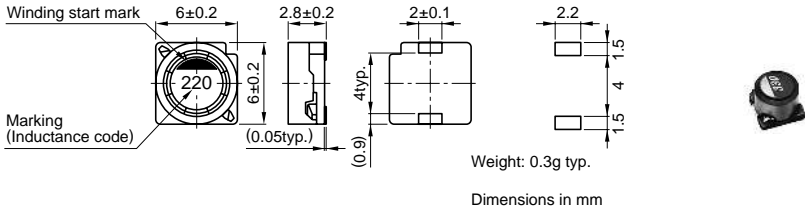
### PACKAGING STYLE AND QUANTITIES

Packaging style	Type	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**  
For Power Line  
SMD

SLF Series SLF6028 Type

**SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN**



**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	1	0.0284	1.6max.	2.5typ.	SLF6028T-4R7M1R6
6.8	±20	1	0.0354	1.5max.	2.2typ.	SLF6028T-6R8M1R5
10	±20	1	0.0532	1.3max.	1.8typ.	SLF6028T-100M1R3
15	±20	1	0.0745	1max.	1.4typ.	SLF6028T-150M1R0
22	±20	1	0.104	0.77max.	1.3typ.	SLF6028T-220MR77
33	±20	1	0.148	0.69max.	1.1typ.	SLF6028T-330MR69
47	±20	1	0.21	0.59max.	0.92typ.	SLF6028T-470MR59
68	±20	1	0.29	0.5max.	0.78typ.	SLF6028T-680MR50
100	±20	1	0.43	0.42max.	0.64typ.	SLF6028T-101MR42

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

- Test equipment Inductance: YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER, or equivalent (Test frequency: 1kHz/0.5V)  
Rdc: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

**TYPICAL ELECTRICAL CHARACTERISTICS**  
**INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS**

