Inductors

For Power Line SMD

PRODUCT IDENTIFICATION

 $\frac{\mathsf{SLF}}{(1)} \ \frac{7032}{(2)} \ \frac{\mathsf{T-}}{(3)} \ \frac{220}{(4)} \ \frac{\mathsf{M}}{(5)} \ \frac{\mathsf{R96}}{(6)} \ \frac{\mathsf{-2}}{(7)}$

SLF Series SLF6028 Type

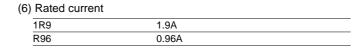
- (1) Series name
- ` '

(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) Packagi	ng style			
Т		Taping(reel)		



(5) Inductance	tolerance	
М	±20%	
N	±30%	



(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

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.

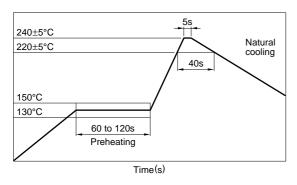
APPLICATIONS

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

SPECIFICATIONS

	Operating temperature	Storage temperature
Type	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



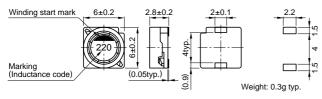


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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN





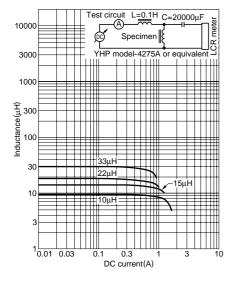
Dimensions in mm

ELECTRICAL CHARACTERISTICS

Industrian Industrian		Took from	DC resistance	Rated current (A)*		
Inductance Inductance (µH) tolerance (%)	Test frequency L (kHz)	DC resistance $(\Omega)\pm20\%$	Based on inductance change	Based on temperature rise	Part No.	
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.

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



531_SLF6028 990803



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