Inductors

For Power Line SMD

SLF Series SLF10145 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.

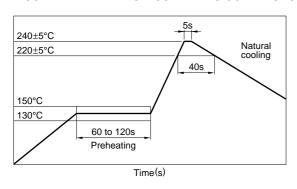
APPLICATIONS

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

SPECIFICATIONS

	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



PRODUCT IDENTIFICATION

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

(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	3.3μΗ	
100	10μΗ	

(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

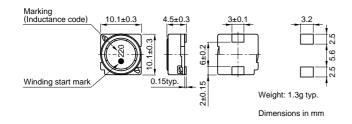
Packaging style	Туре	Quantity
Taping	SLF6025T	1000 pieces/reel
	SLF6028T	1000 pieces/reel
	SLF7028T	1000 pieces/reel
	SLF7030T	1000 pieces/reel
	SLF7032T	1000 pieces/reel
	SLF7045T	1000 pieces/reel
	SLF10145T	500 pieces/reel
	SLF12555T	500 pieces/reel
	SLF12565T	500 pieces/reel
	SLF12575T	500 pieces/reel

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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



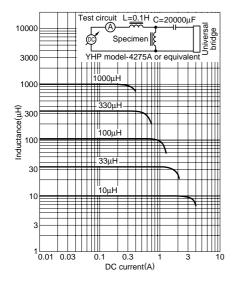


ELECTRICAL CHARACTERISTICS

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	Inductance tolerance (%)	Test frequency L (kHz)	DC resistance (Ω)±20%	Based on inductance change	Based on temperature rise	Part No.
10	±20	1	0.0364	3	2.5	SLF10145T-100M2R5
15	±20	1	0.0472	2.4	2.2	SLF10145T-150M2R2
22	±20	1	0.0591	2.1	1.9	SLF10145T-220M1R9
33	±20	1	0.0815	1.6	1.7	SLF10145T-330M1R6
47	±20	1	0.1	1.4	1.5	SLF10145T-470M1R4
68	±20	1	0.14	1.2	1.3	SLF10145T-680M1R2
100	±20	1	0.2	1	1.1	SLF10145T-101M1R0
150	±20	1	0.35	0.79	0.81	SLF10145T-151MR79
220	±20	1	0.47	0.65	0.7	SLF10145T-221MR65
330	±20	1	0.68	0.54	0.58	SLF10145T-331MR54
470	±20	1	1.03	0.47	0.47	SLF10145T-471MR47
680	±20	1	1.6	0.38	0.38	SLF10145T-681MR38
1000	±20	1	2.8	0.32	0.29	SLF10145T-102MR29
1500	±20	1	3.4	0.22	0.26	SLF10145T-152MR22

^{*} 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.

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



531_SLF10145 990803



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