

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

Conformity to RoHS Directive

## SLF Series SLF10145

### 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.

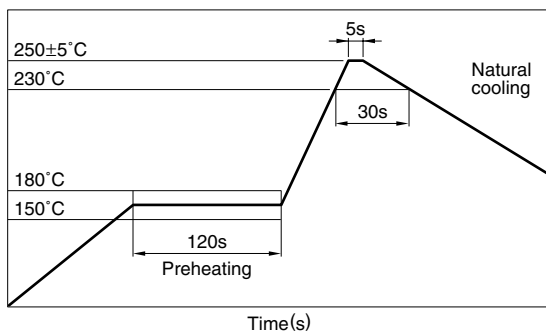
### APPLICATIONS

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	10145	T	220	M	1R9	PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

10145	10.1×10.1×4.5mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

100	10μH
101	100μH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R9	1.9A
R79	0.79A

(7) Lead-free compatible product

PF	Lead-free compatible product
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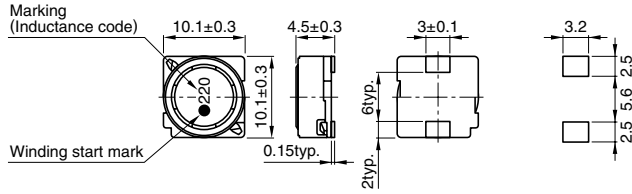
### PACKAGING STYLE AND QUANTITIES

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.

• All specifications are subject to change without notice.

## SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Weight: 1.3g typ.

Dimensions in mm



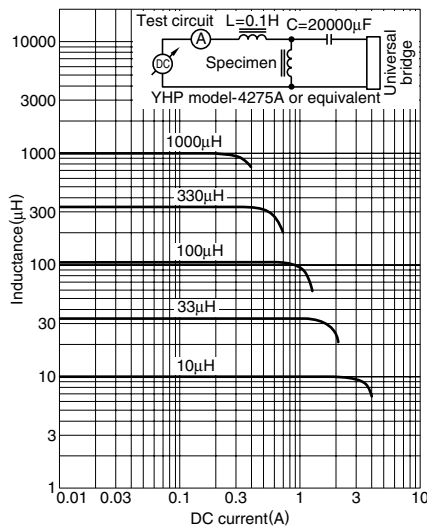
## ELECTRICAL CHARACTERISTICS

Inductance ( $\mu\text{H}$ )	Inductance tolerance	Test frequency L (kHz)	DC resistance ( $\Omega$ ) $\pm 20\%$	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
3.3	$\pm 30\%$	1	0.0161	4.9	3.7	SLF10145T-3R3N3R7-PF
5.6	$\pm 20\%$	1	0.0220	3.8	3.2	SLF10145T-5R6M3R2-PF
10	$\pm 20\%$	1	0.0364	3	2.5	SLF10145T-100M2R5-PF
15	$\pm 20\%$	1	0.0472	2.4	2.2	SLF10145T-150M2R2-PF
22	$\pm 20\%$	1	0.0591	2.1	1.9	SLF10145T-220M1R9-PF
33	$\pm 20\%$	1	0.0815	1.6	1.7	SLF10145T-330M1R6-PF
47	$\pm 20\%$	1	0.1	1.4	1.5	SLF10145T-470M1R4-PF
68	$\pm 20\%$	1	0.14	1.2	1.3	SLF10145T-680M1R2-PF
100	$\pm 20\%$	1	0.2	1	1.1	SLF10145T-101M1R0-PF
150	$\pm 20\%$	1	0.35	0.79	0.81	SLF10145T-151MR79-PF
220	$\pm 20\%$	1	0.47	0.65	0.7	SLF10145T-221MR65-PF
330	$\pm 20\%$	1	0.68	0.54	0.58	SLF10145T-331MR54-PF
470	$\pm 20\%$	1	1.03	0.47	0.47	SLF10145T-471MR47-PF
680	$\pm 20\%$	1	1.6	0.38	0.38	SLF10145T-681MR38-PF
1000	$\pm 20\%$	1	2.8	0.32	0.29	SLF10145T-102MR29-PF
1500	$\pm 20\%$	1	3.4	0.22	0.26	SLF10145T-152MR22-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



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