

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

Conformity to RoHS Directive

## SLF Series SLF12565

### 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.

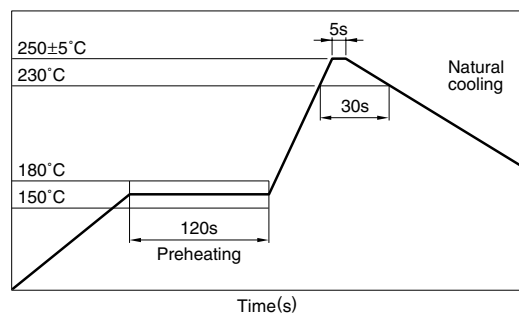
### APPLICATIONS

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

### SPECIFICATIONS

Operating temperature range	-20 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

### RECOMMENDED REFLOW SOLDERING CONDITIONS



### PRODUCT IDENTIFICATION

SLF	12565	T-	220	M	3R5	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

12565	12.5×12.5×6.5mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

2R0	2μH
100	10μH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R6	1.6A
3R5	3.5A

(7) Lead-free compatible product

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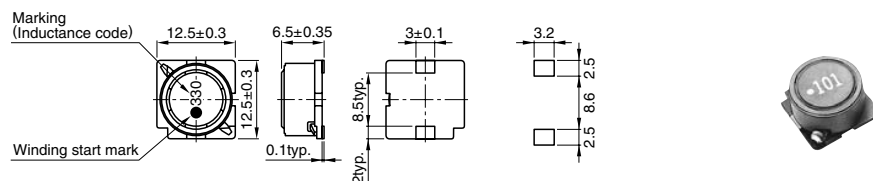
### PACKAGING STYLE AND QUANTITIES

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: 3.2g

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	
2	$\pm 30\%$	1	0.0117	10	6.2	SLF12565T-2R0N6R2-PF
4.2	$\pm 30\%$	1	0.015	7.3	5.5	SLF12565T-4R2N5R5-PF
7	$\pm 30\%$	1	0.0177	5.7	5	SLF12565T-7R0N5R0-PF
10	$\pm 20\%$	1	0.0202	5	4.8	SLF12565T-100M4R8-PF
15	$\pm 20\%$	1	0.0237	4.2	4.4	SLF12565T-150M4R2-PF
22	$\pm 20\%$	1	0.0316	3.5	3.8	SLF12565T-220M3R5-PF
33	$\pm 20\%$	1	0.0406	2.8	3.4	SLF12565T-330M2R8-PF
47	$\pm 20\%$	1	0.0578	2.4	2.8	SLF12565T-470M2R4-PF
68	$\pm 20\%$	1	0.0787	2	2.4	SLF12565T-680M2R0-PF
100	$\pm 20\%$	1	0.123	1.6	1.9	SLF12565T-101M1R6-PF
220	$\pm 20\%$	1	0.273	1	1.2	SLF12565T-221M1R0-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 40°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

