

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

Conformity to RoHS Directive

### SLF Series SLF6028

#### **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.

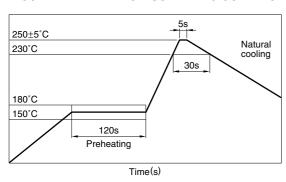
#### **APPLICATIONS**

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

#### **SPECIFICATIONS**

Operating temperature range	−20 to +85°C	
	[Including self-temperature rise]	
Storage temperature range	–40 to +85°C[Unit of products]	

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	6028	T-	4R7	M	1R6	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Series name
- (2) Dimensions

6028	$6.0\times6.0\times2.8$ mm (L×W×T)	

#### (3) Packaging style

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-	т	Taning/va.al)
		Taping(reel)

#### (4) Inductance value

4R7	4.7μΗ	
100	10uH	

#### (5) Inductance tolerance

M	±20%	

#### (6) Rated current

1R6	1.6A	
R77	0.77A	

#### (7) Lead-free compatible product

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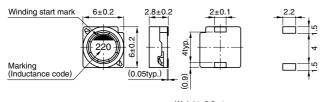
#### **PACKAGING STYLE AND QUANTITIES**

Packaging style	Quantity
Taping	1000 pieces/reel

<sup>•</sup> 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.



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



Weight: 0.3g typ.

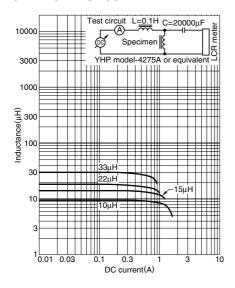
Dimensions in mm

#### **ELECTRICAL CHARACTERISTICS**

Inductance	Inductance	Toot from Longy	DC resistance	Rated current (A)*		
(μH)	tolerance	Test frequency L (kHz)	$(\Omega)\pm20\%$	Based on inductance change	Based on temperature rise	Part No.
4.7	±20%	100	0.0284	1.6max.	2.5typ.	SLF6028T-4R7M1R6-PF
6.8	±20%	100	0.0354	1.5max.	2.2typ.	SLF6028T-6R8M1R5-PF
10	±20%	100	0.0532	1.3max.	1.8typ.	SLF6028T-100M1R3-PF
15	±20%	100	0.0745	1max.	1.4typ.	SLF6028T-150M1R0-PF
22	±20%	100	0.104	0.77max.	1.3typ.	SLF6028T-220MR77-PF
33	±20%	100	0.148	0.69max.	1.1typ.	SLF6028T-330MR69-PF
47	±20%	100	0.21	0.59max.	0.92typ.	SLF6028T-470MR59-PF
68	±20%	100	0.29	0.5max.	0.78typ.	SLF6028T-680MR50-PF
100	±20%	100	0.43	0.42max.	0.64typ.	SLF6028T-101MR42-PF
150	±20%	100	0.65	0.34max.	0.5typ.	SLF6028T-151MR34-PF
220	±20%	100	0.98	0.26max.	0.38typ.	SLF6028T-221MR26-PF

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

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



<sup>•</sup> Test equipment L: 4194A IMPEDANCE/GAIN-PHASE ANALYZER HP, or equivalent (Test frequency: 100kHz/0.5V)
Rdc: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

<sup>•</sup> All specifications are subject to change without notice.