

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

Conformity to RoHS Directive

## SLF Series SLF7045

### 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.

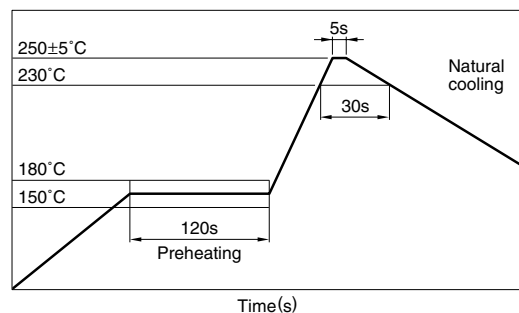
### APPLICATIONS

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	7045	T-	220	M	R90	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

(1) Series name

(2) Dimensions

7045 7.0×7.0×4.5mm (L×W×T)

(3) Packaging style

T Taping(reel)

(4) Inductance value

3R3	3.3μH
100	10μH

(5) Inductance tolerance

M ±20%

(6) Rated current

2R5	2.5A
R90	0.90A

(7) Lead-free compatible product

PF Lead-free compatible product

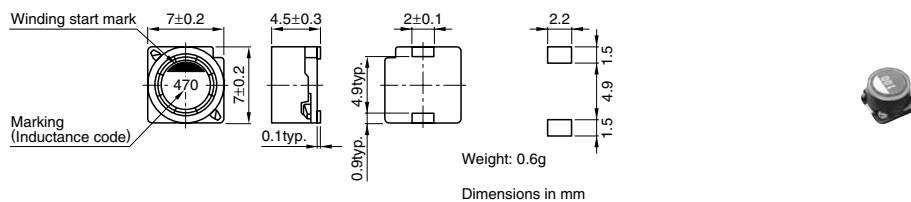
### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	1000 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



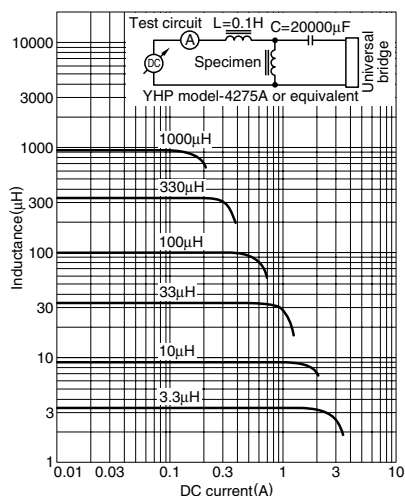
### ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current(A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
3.3	±20%	100	0.02	2.5	2.3	SLF7045T-3R3M2R5-PF
4.7	±20%	100	0.03	2	2.1	SLF7045T-4R7M2R0-PF
6.8	±20%	100	0.039	1.7	1.74	SLF7045T-6R8M1R7-PF
10	±20%	100	0.036	1.3	1.78	SLF7045T-100M1R3-PF
15	±20%	100	0.052	1.1	1.53	SLF7045T-150M1R1-PF
22	±20%	100	0.061	0.9	1.34	SLF7045T-220MR90-PF
33	±20%	100	0.096	0.82	1.09	SLF7045T-330MR82-PF
47	±20%	100	0.125	0.75	0.92	SLF7045T-470MR75-PF
68	±20%	100	0.175	0.6	0.77	SLF7045T-680MR60-PF
100	±20%	100	0.25	0.5	0.65	SLF7045T-101MR50-PF
150	±20%	100	0.34	0.4	0.55	SLF7045T-151MR40-PF
220	±20%	100	0.52	0.33	0.45	SLF7045T-221MR33-PF
330	±20%	100	0.74	0.25	0.37	SLF7045T-331MR25-PF
470	±20%	100	1.05	0.22	0.31	SLF7045T-471MR22-PF
680	±20%	100	1.48	0.2	0.27	SLF7045T-681MR20-PF
1000	±20%	100	2.28	0.14	0.25	SLF7045T-102MR14-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 20°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 100kHz/0.5V)  
Rdc: MATSUSHITA, VP-2941A DIGITAL MILLIOHM METER, or equivalent

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



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