



**THE DATASHEET OF  
SLF10145T-680M1R2**



# 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.

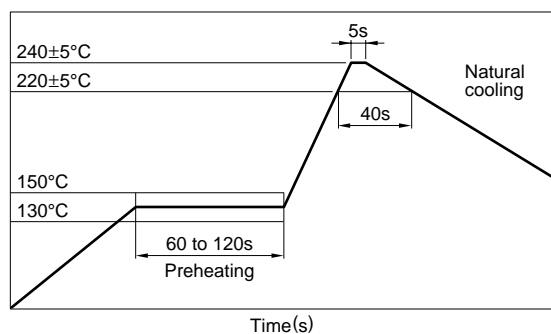
### APPLICATIONS

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

### SPECIFICATIONS

Type	Operating temperature range [Including self-temperature rise]	Storage temperature range [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

SLF	7032	T	220	M	R96	-2
(1)	(2)	(3)	(4)	(5)	(6)	(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

T	Taping(reel)
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(4) Inductance value

3R3	3.3μH
100	10μH

(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	Type	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

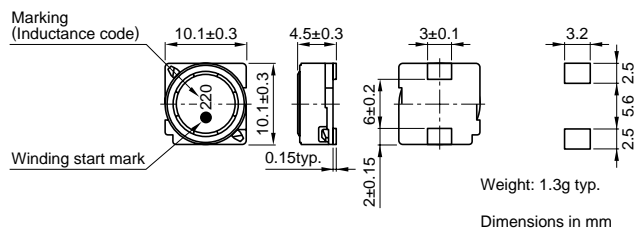
# Inductors

## For Power Line

### SMD

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### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



### ELECTRICAL CHARACTERISTICS

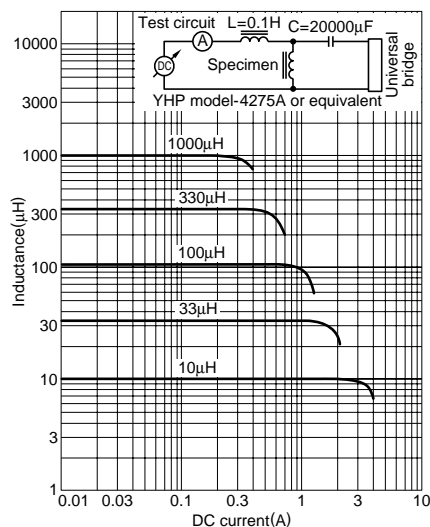
Inductance (μH)	Inductance tolerance (%)	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
10	±20	1	0.0364	3	2.5	SLF10145T-100M2R5
15	±20	1	0.0472	2.4	2.2	SLF10145T-150M2R2
22	±20	1	0.0591	2.1	1.9	SLF10145T-220M1R9
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.

- 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

### TYPICAL ELECTRICAL CHARACTERISTICS

#### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



## Looking for pricing, stock, or lifecycle information?

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- ⊖ [TDK Corporation](#) Information

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- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management