



**THE DATASHEET OF
SLF7045T-331MR25**



Inductors

For Power Line SMD

SLF Series SLF7045 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.

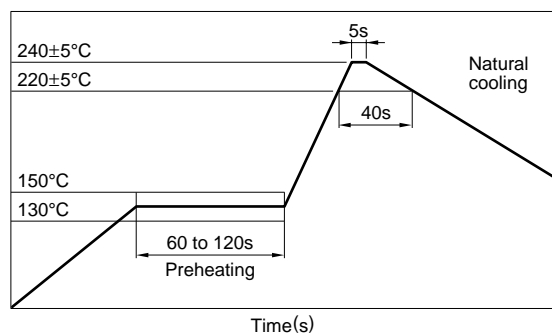
APPLICATIONS

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

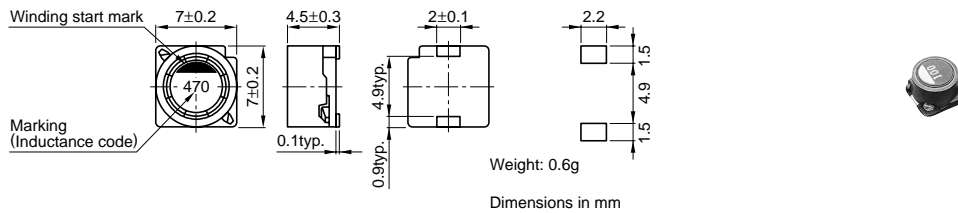
Inductors

For Power Line

SMD

SLF Series SLF7045 Type

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

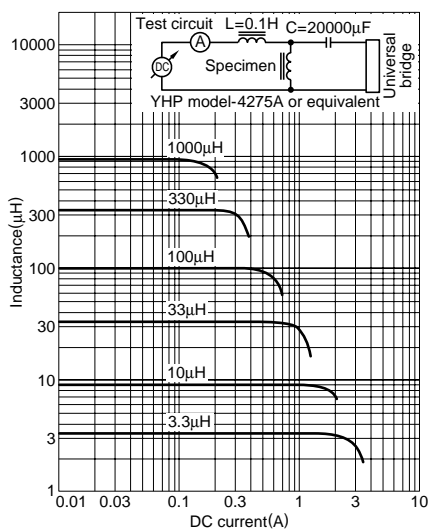
Inductance (μH)	Inductance tolerance (%)	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current(A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
3.3	±20	1	0.02	2.5	2.3	SLF7045T-3R3M2R5
4.7	±20	1	0.03	2	2.1	SLF7045T-4R7M2R0
6.8	±20	1	0.039	1.7	1.74	SLF7045T-6R8M1R7
10	±20	1	0.036	1.3	1.78	SLF7045T-100M1R3
15	±20	1	0.052	1.1	1.53	SLF7045T-150M1R1
22	±20	1	0.061	0.9	1.34	SLF7045T-220MR90
33	±20	1	0.096	0.82	1.09	SLF7045T-330MR82
47	±20	1	0.125	0.75	0.92	SLF7045T-470MR75
68	±20	1	0.175	0.6	0.77	SLF7045T-680MR60
100	±20	1	0.25	0.5	0.65	SLF7045T-101MR50
150	±20	1	0.34	0.4	0.55	SLF7045T-151MR40
220	±20	1	0.52	0.33	0.45	SLF7045T-221MR33
330	±20	1	0.74	0.25	0.37	SLF7045T-331MR25
470	±20	1	1.05	0.22	0.31	SLF7045T-471MR22
680	±20	1	1.48	0.2	0.27	SLF7045T-681MR20
1000	±20	1	2.28	0.14	0.25	SLF7045T-102MR14

* Rated current: Value obtained when current flows and the temperature has risen to 20°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



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