

INDUCTORS

Leadless



SLF SERIES (Magnetic Shielded) - Large Current Type

SLF series large current leadless inductors have been developed for surface mount design of power circuits. TDK's high performance ferrite core material and low-profile design, ensure superior characteristics and high reliability.

Features

- Low-profile SMD type.
- Magnetic shielded type. Suitable for high density mounting.
- Provided with embossed carrier tape packaging for automatic mounting machines.
- Only reflow soldering is applicable.

Applications

For power source circuits, low profile-type DC to DC converters, DC to AC inverters etc.

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Characteristics

SLF7032T

Temperature rise	20°C maximum
Ambient temperature	60°C maximum
Rated temperature range	-25 ~ +85°C (including temperature rise)
Storage temperature range	-40 ~ +85°C

SLF10145

Temperature rise	+30°C typical
Ambient temperature	+60°C maximum
Operating temperature (including self temperature rise)	-20 to +90°C
Storage temperature range	-40 ~ +90°C

Product Identification

SLF 7032 T - □□□ M □□□ - □
(1) (2) (3) (4) (5) (6) (7)

SLF 10145 T - 3R3 Y 2R2
(1) (2) (3) (4) (5) (6)

(1) Series name

(2) Dimensions (mm) [Inches]

7032	7.0 L x 3.2 T [.276 x .126]
7045	7.0 L x 4.5 T [.276 x .177]
10145	10.1 L x 4.5 T [.398 x .177]
12555	12.5 L x 5.5 T [.492 x .217]

(3) Packaging style

T	Taping (φ178 mm [7.008 inches] reel)
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(4) Inductance (Examples)

2R2	2.2μH
470	47μH
331	330μH

102 1000μH

(5) Inductance tolerance

M ±20%

(6) Rated current (Examples)

3R6 3.6A

R67 0.67A

(7) Internal code

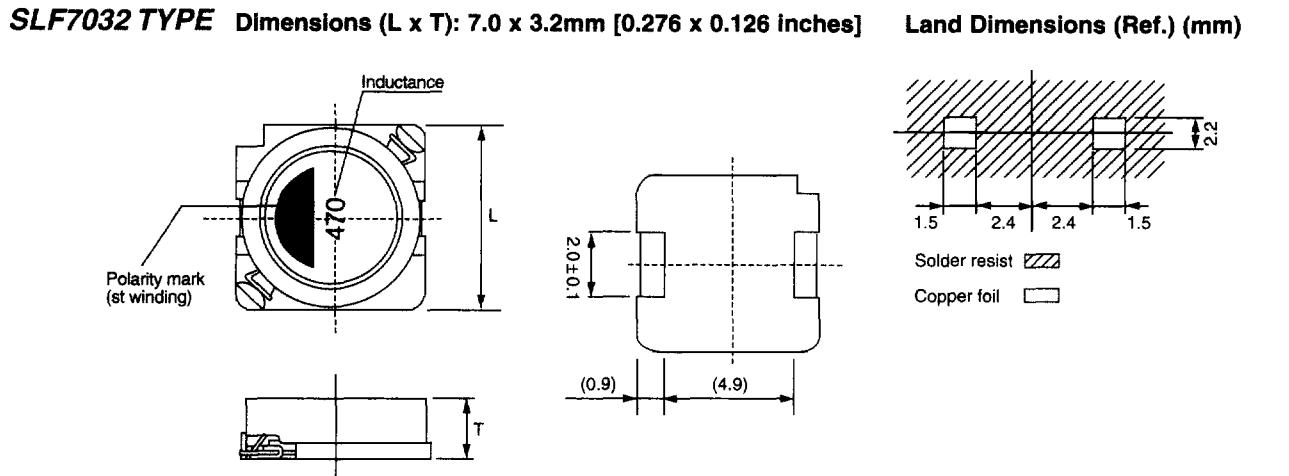
Packaging quantities

Size	Quantity (Pcs./Reel)
7032	1000 pcs./reel
7045	1000 pcs./reel
10145	500 pcs./reel
12555	500 pcs./reel

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SLF SERIES - High Current Type



Electrical Characteristics

Part Number	Inductance L (μ H)	Test Frequency of L (Hz)	Resistance RDC (Ω)	Rated DC Current (A)	Marking
SLF7032T-3R3M1R9-2	3.3±20%	1k	0.023±20%	1.90	3R3
SLF7032T-4R7M1R7-2	4.7±20%	1k	0.036±20%	1.70	4R7
SLF7032T-6R8M1R6-2	6.8±20%	1k	0.041±20%	1.60	6R8
SLF7032T-100M1R4-2	10±20%	1k	0.053±20%	1.40	100
SLF7032T-150M1R1-2	15±20%	1k	0.075±20%	1.10	150
SLF7032T-220MR96-2	22±20%	1k	0.11±20%	0.96	220
SLF7032T-330MR75-2	33±20%	1k	0.16±20%	0.75	330
SLF7032T-470MR67-2	47±20%	1k	0.24±20%	0.67	470
SLF7032T-680MR59-2	68±20%	1k	0.31±20%	0.59	680
SLF7032T-101MR45-2	100±20%	1k	0.45±20%	0.45	101
SLF7032T-151MR37-2	150±20%	1k	0.65±20%	0.37	151
SLF7032T-221MR29-2	220±20%	1k	1.05±20%	0.29	221
SLF7032T-331MR22-2	330±20%	1k	1.67±20%	0.22	331
SLF7032T-471MR20-2	470±20%	1k	2.05±20%	0.20	471
SLF7032T-681MR16-2	680±20%	1k	3.15±20%	0.16	681
SLF7032T-102MR13-2	1000±20%	1k	4.78±20%	0.13	102

Note: Test equipment

L: YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER ($F = 1\text{kHz}$, OSC = 0.5V), or equivalent

RDC: MATSUSHITA VP-2941A MILLIOHM METER, or equivalent

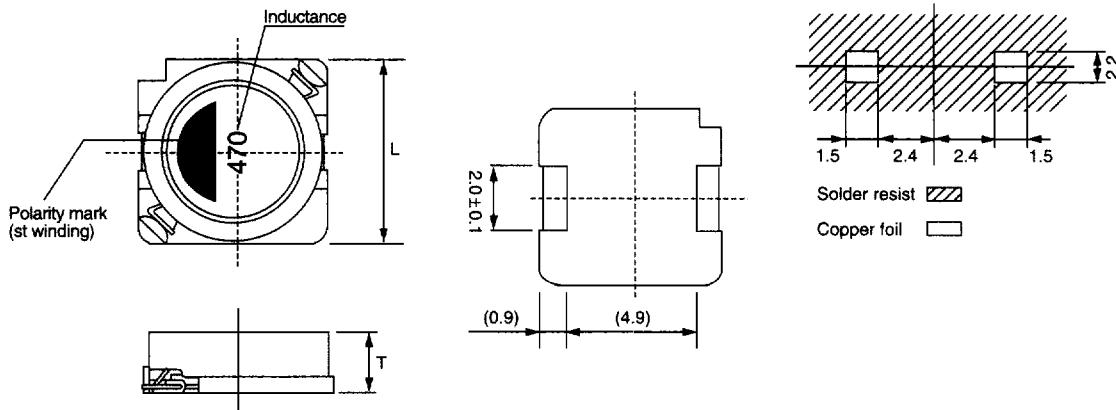
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SLF SERIES - High Current Type

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SLF7045 TYPE Dimensions (L x T): 7.0 x 4.5mm [0.276 x 0.177 inches] Land Dimensions (Ref.) (mm)



Electrical Characteristics

Part Number	Inductance L (μ H)	Test Frequency of L (Hz)	Resistance RDC (m Ω)	Rated DC Current (A)	Marking
SLF7045T-3R3M2R2	3.3±20%	1k	0.028±20%	2.2	3R3
SLF7045T-4R7M2R1	4.7±20%	1k	0.031±20%	2.1	4R7
SLF7045T-6R8M1R9	6.8±20%	1k	0.039±20%	1.9	6R8
SLF7045T-100M1R8	10±20%	1k	0.047±20%	1.8	100
SLF7045T-150M1R5	15±20%	1k	0.068±20%	1.5	150
SLF7045T-220M1R3	22±20%	1k	0.082±20%	1.3	220
SLF7045T-330M1R1	33±20%	1k	0.12±20%	1.1	330
SLF7045T-470MR90	47±20%	1k	0.18±20%	0.90	470
SLF7045T-680MR75	68±20%	1k	0.27±20%	0.75	680
SLF7045T-101MR60	100±20%	1k	0.39±20%	0.60	101
SLF7045T-151MR50	150±20%	1k	0.55±20%	0.50	151
SLF7045T-221MR40	220±20%	1k	0.83±20%	0.40	221
SLF7045T-331MR35	330±20%	1k	1.15±20%	0.35	331

Note: Test equipment

L: YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER (F = 1kHz, OSC = 0.5V), or equivalent

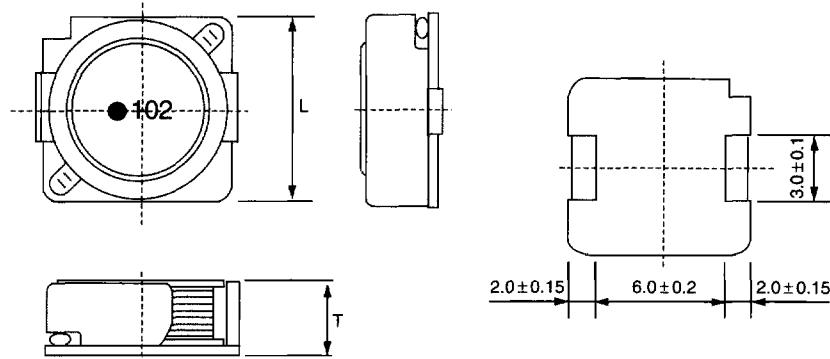
RDC: MATSUSHITA VP-2941A MILLIOHM METER, or equivalent

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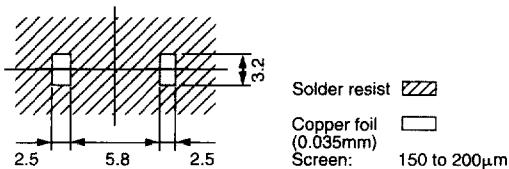
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SLF SERIES - High Current Type

SLF10145 TYPE Dimensions (L x T): 10.1 x 4.5mm [0.398 x 0.177 inches]



Land Dimensions (Ref.) (mm)



Electrical Characteristics

Part Number	Inductance L (μ H)	Test Frequency of L (Hz)	Resistance RDC (Ω)	Rated Current Idc Max. (A)	Marking
SLF10145T-100M2R5	10±20%	1k	36.4m±20%	2.50	● 100
SLF10145T-150M2R2	15±20%	1k	47.2m±20%	2.20	● 150
SLF10145T-220M1R9	22±20%	1k	59.1m±20%	1.90	● 220
SLF10145T-330M1R6	33±20%	1k	81.5m±20%	1.60	● 330
SLF10145T-470M1R4	47±20%	1k	0.10±20%	1.40	● 470
SLF10145T-680M1R2	68±20%	1k	0.14±20%	1.20	● 680
SLF10145T-101M1R0	100±20%	1k	0.20±20%	1.00	● 101
SLF10145T-151MR79	150±20%	1k	0.35±20%	0.79	● 151
SLF10145T-221MR65	220±20%	1k	0.47±20%	0.65	● 221
SLF10145T-331MR54	330±20%	1k	0.68±20%	0.54	● 331
SLF10145T-471MR47	470±20%	1k	1.03±20%	0.47	● 471
SLF10145T-681MR38	680±20%	1k	1.6±20%	0.38	● 681
SLF10145T-102MR29	1000±20%	1k	2.8±20%	0.29	● 102
SLF10145T-152MR22	1500±20%	1k	3.4±20%	0.22	● 152

IDC: Based on temperature rise (ΔT : 30°C typical)
or on Inductance change (ΔL : -10% max.)

Note: Test equipment

L: YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER ($F = 1\text{kHz}$, $\text{OSC} = 0.5\text{V}$), or equivalent

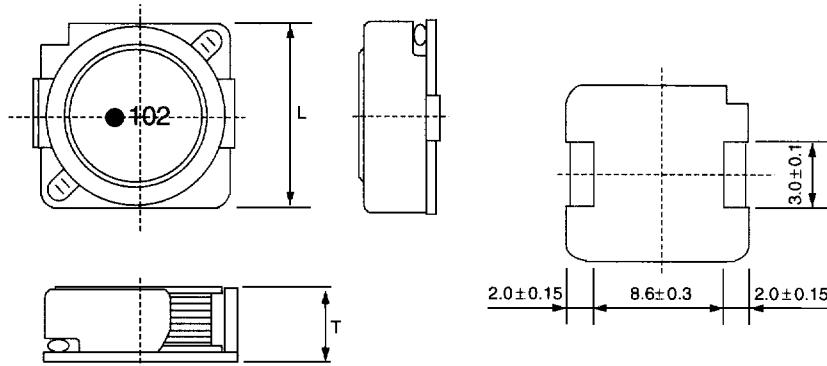
RDC: MATSUSHITA VP-2941A MILLIOHM METER, or equivalent

INDUCTORS

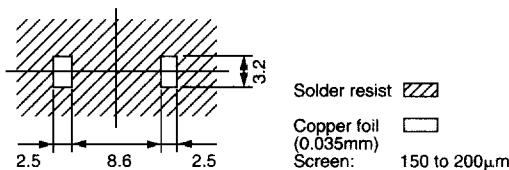
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SLF SERIES - High Current Type

SLF12555 TYPE Dimensions (L x T): 12.5 x 5.5mm [0.492 x 0.217 inches]



Land Dimensions (Ref.) (mm)



Electrical Characteristics

Part Number	Inductance L (μ H)	Test Frequency of L (Hz)	Resistance RDC (Ω)	Rated Current Idc (A)	Marking
SLF12555T-6R0N3R6	6±30%	1k	16.4m±20%	3.6	●6R0
SLF12555T-100M3R4	10±20%	1k	21.5m±20%	3.4	●100
SLF12555T-150M2R8	15±20%	1k	25.9m±20%	2.8	●150
SLF12555T-220M2R3	22±20%	1k	33.8m±20%	2.3	●220
SLF12555T-330M1R9	33±20%	1k	41.5m±20%	1.9	●330
SLF12555T-470M1R6	47±20%	1k	61.8m±20%	1.6	●470
SLF12555T-680M1R3	68±20%	1k	83.2m±20%	1.3	●680
SLF12555T-101M1R1	100±20%	1k	0.117±20%	1.1	●101
SLF12555T-151MR88	150±20%	1k	0.19±20%	0.88	●151
SLF12555T-221MR72	220±20%	1k	0.27±20%	0.72	●221
SLF12555T-331MR59	330±20%	1k	0.41±20%	0.59	●331
SLF12555T-471MR49	470±20%	1k	0.52±20%	0.49	●471
SLF12555T-681MR43	680±20%	1k	0.76±20%	0.43	●681
SLF12555T-102MR34	1000±20%	1k	1.12±20%	0.34	●102
SLF12555T-152MR29	1500±20%	1k	1.73±20%	0.29	●152

IDC: Based on Inductance change (ΔL : -10% max.)

Note: Test equipment

L: YHP 4194A IMPEDANCE GAIN/PHASE ANALYZER ($F = 1\text{kHz}$, $\text{OSC} = 0.5\text{V}$),
or equivalent

RDC: MATSUSHITA VP-2941A MILLIOHM METER, or equivalent