

# Inductors for Power Circuits

Wound/STD • magnetic shielded

## SLF series

Type:	SLF6025 (6.0x6.0 mm)
	SLF6028 (6.0x6.0 mm)
	SLF6045 (6.0x6.0 mm)
	SLF7032 (7.0x7.0 mm)
	SLF7045 (7.0x7.0 mm)
	SLF7055 (7.0x7.0 mm)
	SLF10145 (10.1x10.1 mm)
	SLF10165 (10.1x10.1 mm)
	SLF12555 (12.5x12.5 mm)
	SLF12565 (12.5x12.5 mm)
	SLF12575 (12.5x12.5 mm)

Issue date: September 2012

- All specifications are subject to change without notice.
- 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.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF6025

#### 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.

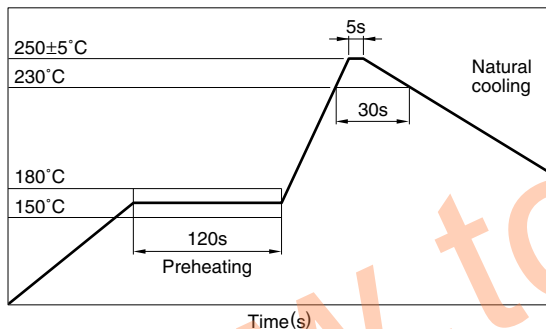
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	6025	T-	4R7	M	1R5	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

(1) Series name

(2) Dimensions

6025	6.0×6.0×2.5mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

4R7	4.7μH
100	10μH

(5) Inductance tolerance

M	±20%
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(6) Rated current

1R5	1.5A
R88	0.88A

(7) Lead-free compatible product

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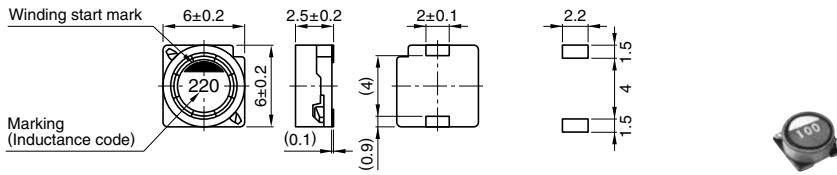
#### PACKAGING STYLE AND QUANTITIES

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**



Weight: 0.3g typ.

Dimensions in mm

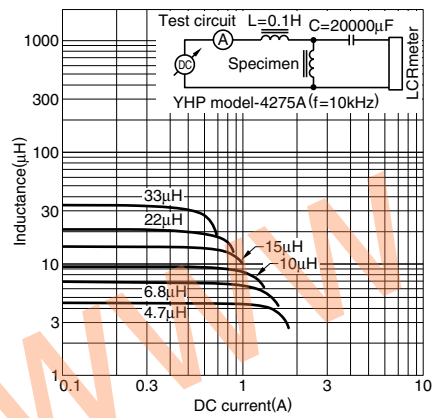
**ELECTRICAL CHARACTERISTICS**

Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)*		Part No.
				Based on inductance change	Based on temperature rise	
4.7	±20%	100	0.0306	1.5max.	1.8typ.	SLF6025T-4R7M1R5-PF
6.8	±20%	100	0.0442	1.3max.	1.5typ.	SLF6025T-6R8M1R3-PF
10	±20%	100	0.0573	1max.	1.3typ.	SLF6025T-100M1R0-PF
15	±20%	100	0.085	0.88max.	1.1typ.	SLF6025T-150MR88-PF
22	±20%	100	0.122	0.73max.	0.94typ.	SLF6025T-220MR73-PF
33	±20%	100	0.18	0.59max.	0.79typ.	SLF6025T-330MR59-PF
47	±20%	100	0.24	0.48max.	0.67typ.	SLF6025T-470MR48-PF
68	±20%	100	0.37	0.42max.	0.54typ.	SLF6025T-680MR42-PF
100	±20%	100	0.5	0.33max.	0.47typ.	SLF6025T-101MR33-PF

\* 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.

- Test equipment: L: 4194A IMPEDANCE/GAIN-PHASE ANALYZER HP, or equivalent  
Rdc: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

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



• All specifications are subject to change without notice.

# Inductors for Power Circuits

## Wound/STD • 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.

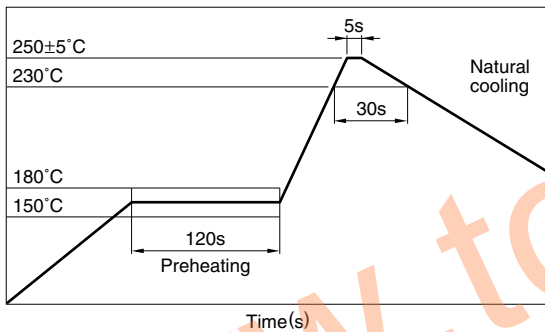
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°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	6.0×6.0×2.8mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

4R7	4.7μH
100	10μH

(5) Inductance tolerance

M	±20%
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(6) Rated current

1R6	1.6A
R77	0.77A

(7) Lead-free compatible product

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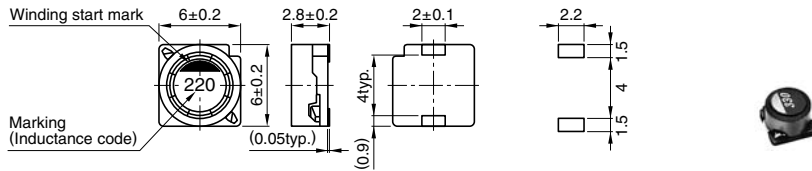
#### PACKAGING STYLE AND QUANTITIES

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



Weight: 0.3g typ.

Dimensions in mm

## ELECTRICAL CHARACTERISTICS

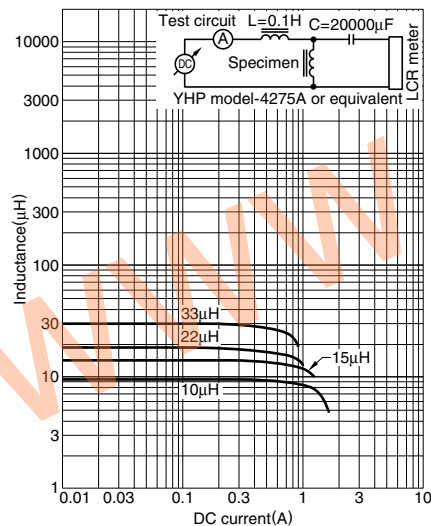
Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)*		Part No.
				Based on inductance change	Based on temperature rise	
4.7	±20%	100	0.0284	1.6max.	2.5typ.	SLF6028T-4R7M1R6-PF
6.8	±20%	100	0.0354	1.5max.	2.2typ.	SLF6028T-6R8M1R5-PF
10	±20%	100	0.0532	1.3max.	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

\* 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.

- 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

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



• All specifications are subject to change without notice.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF6045

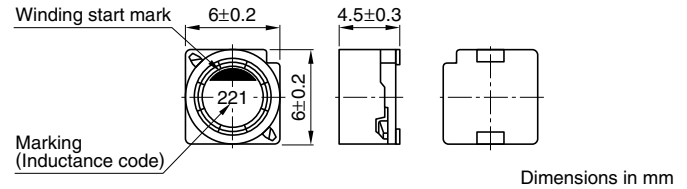
#### FEATURES

- Miniature size  
Mount area: 6×6mm  
Height: 4.8mm max.
- Generic use for portable DC to DC converter line.
- High magnetic shield construction should actualize high resolution for EMC protection.
- Available for automatic mounting in tape and reel package.
- The products do not contain lead and support lead-free soldering.

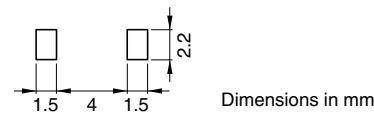
#### APPLICATIONS

LCD-TV's, PDP-TV's, LCD displays, DVD recorders, HDDs, DSCs, etc.

#### SHAPES AND DIMENSIONS



#### RECOMMENDED PC BOARD PATTERN



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance (mΩ)	Rated current(A)*	
					Based on inductance change	Based on temperature rise
SLF6045T-1R5N4R0-3PF	1.5	±30	100	16±30%	4	4.1
SLF6045T-2R2N3R3-3PF	2.2	±30	100	18±30%	3.3	3.8
SLF6045T-3R3N2R8-3PF	3.3	±30	100	21.5±30%	2.8	3.4
SLF6045T-4R7N2R4-3PF	4.7	±30	100	26.5±30%	2.4	3.2
SLF6045T-6R8N2R0-3PF	6.8	±30	100	33±30%	2	2.8
SLF6045T-100M1R6-3PF	10	±20	100	39±20%	1.6	2.7
SLF6045T-150M1R3-3PF	15	±20	100	59.5±20%	1.3	2.2
SLF6045T-220M1R1-3PF	22	±20	100	82±20%	1.1	1.8

\* Rated current: Value obtained when current flows and the temperature has risen to 30°C or when DC current flows and the nominal value of inductance has fallen by 10%, whichever is smaller.

- Operating temperature range: -40 to +105°C (Including self-temperature rise)

• 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.

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# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF7032

#### 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.

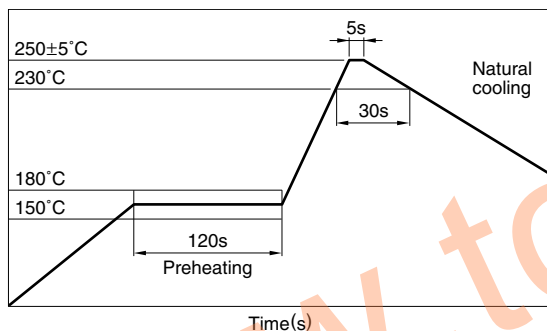
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	7032	T-	220	M	R96	-2	PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(1) Series name

(2) Dimensions

7032	7.0×7.0×3.2mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

3R3	3.3μH
100	10μH

(5) Inductance tolerance

M	±20%
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(6) Rated current

1R9	1.9A
R96	0.96A

(7) TDK internal code

Some products may not have this number.

(8) Lead-free compatible product

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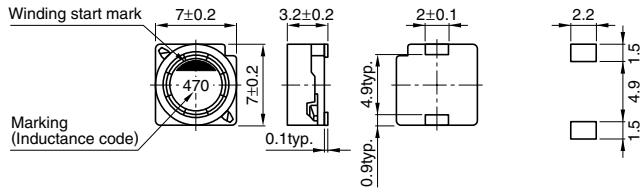
#### PACKAGING STYLE AND QUANTITIES

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.

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## SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Weight: 0.4g

Dimensions in mm



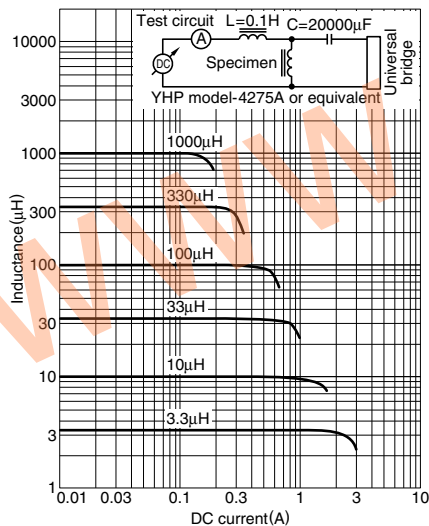
## ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)max.	Part No.
3.3	±20%	100	0.023	1.9	SLF7032T-3R3M1R9-2PF
4.7	±20%	100	0.030	1.7	SLF7032T-4R7M1R7-2PF
6.8	±20%	100	0.041	1.6	SLF7032T-6R8M1R6-2PF
10	±20%	100	0.053	1.4	SLF7032T-100M1R4-2PF
15	±20%	100	0.075	1.1	SLF7032T-150M1R1-2PF
22	±20%	100	0.11	0.96	SLF7032T-220MR96-2PF
33	±20%	100	0.16	0.75	SLF7032T-330MR75-2PF
47	±20%	100	0.24	0.67	SLF7032T-470MR67-2PF
68	±20%	100	0.31	0.59	SLF7032T-680MR59-2PF
100	±20%	100	0.45	0.45	SLF7032T-101MR45-2PF
150	±20%	100	0.65	0.37	SLF7032T-151MR37-2PF
220	±20%	100	1.05	0.29	SLF7032T-221MR29-2PF
330	±20%	100	1.67	0.22	SLF7032T-331MR22-2PF
470	±20%	100	2.05	0.2	SLF7032T-471MR20-2PF
680	±20%	100	3.15	0.16	SLF7032T-681MR16-2PF
1000	±20%	100	4.78	0.13	SLF7032T-102MR13-2PF

- 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



• All specifications are subject to change without notice.



# Inductors for Power Circuits

## Wound/STD • 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.

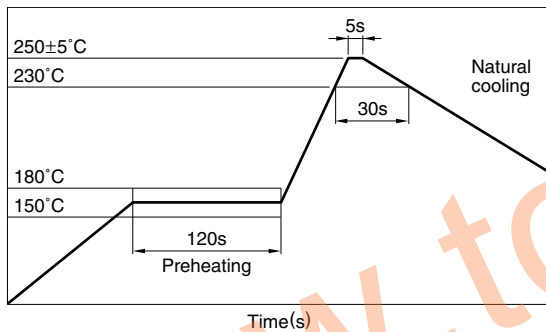
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°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)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

3R3	3.3μH
100	10μH

(5) Inductance tolerance

M	±20%
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(6) Rated current

2R5	2.5A
R90	0.90A

(7) Lead-free compatible product

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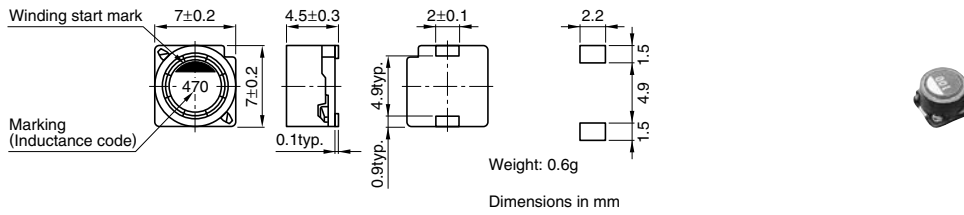
#### PACKAGING STYLE AND QUANTITIES

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

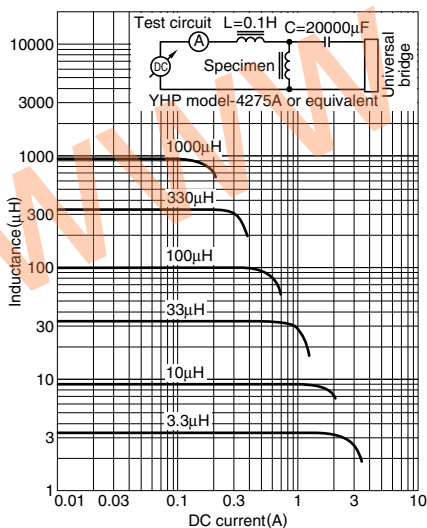
Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current(A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
3.3	±20%	100	0.02	2.5	2.3	SLF7045T-3R3M2R5-PF
4.7	±20%	100	0.03	2	2.1	SLF7045T-4R7M2R0-PF
6.8	±20%	100	0.039	1.7	1.74	SLF7045T-6R8M1R7-PF
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



• All specifications are subject to change without notice.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF7055

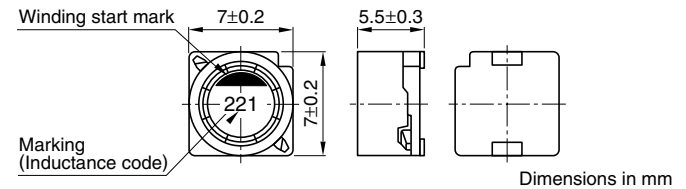
#### FEATURES

- Miniature size  
Mount area: 7×7mm  
Height: 5.8mm max.
- Generic use for portable DC to DC converter line.
- High magnetic shield construction should actualize high resolution for EMC protection.
- Available for automatic mounting in tape and reel package.
- The products do not contain lead and support lead-free soldering.

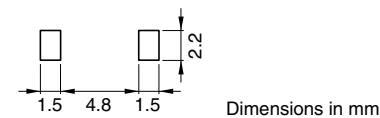
#### APPLICATIONS

LCD-TVs, PDP-TVs, LCD displays, DVD recorders, HDDs, DSCs, etc.

#### SHAPES AND DIMENSIONS



#### RECOMMENDED PC BOARD PATTERN



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance (mΩ)	Rated current(A)*	
					Based on inductance change	Based on temperature rise
SLF7055T-1R5N4R0-3PF	1.5	±30	100	17.4±30%	6.2	4
SLF7055T-2R2N3R5-3PF	2.2	±30	100	21.7±30%	5.3	3.5
SLF7055T-3R3N3R3-3PF	3.3	±30	100	24±30%	4.3	3.3
SLF7055T-4R7N3R1-3PF	4.7	±30	100	28±30%	3.6	3.1
SLF7055T-6R8N2R8-3PF	6.8	±30	100	34±30%	3	2.8
SLF7055T-100M2R5-3PF	10	±20	100	39.1±20%	2.6	2.5
SLF7055T-150M2R1-3PF	15	±20	100	50.8±20%	2.1	2.2
SLF7055T-220M1R7-3PF	22	±20	100	64.3±20%	1.7	2

\* Rated current: Value obtained when current flows and the temperature has risen to 30°C or when DC current flows and the nominal value of inductance has fallen by 10%, whichever is smaller.

- Operating temperature range: -40 to +105°C (Including self-temperature rise)

• 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.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF10145

#### 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.

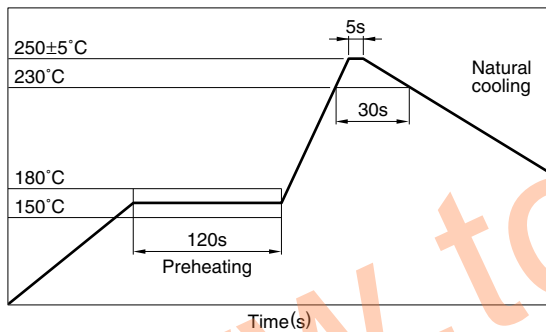
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	10145	T	220	M	1R9	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

10145	10.1×10.1×4.5mm (L×W×T)
-------	-------------------------

(3) Packaging style

T	Taping(reel)
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(4) Inductance value

100	10μH
101	100μH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R9	1.9A
R79	0.79A

(7) Lead-free compatible product

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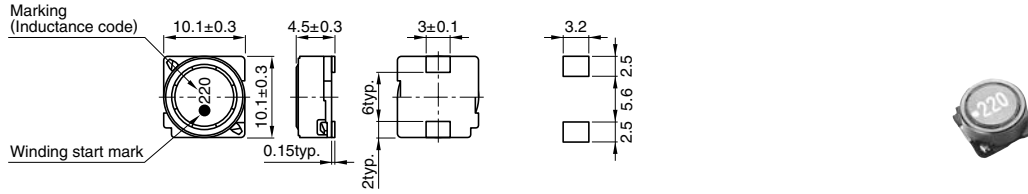
#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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



Weight: 1.3g typ.

Dimensions in mm

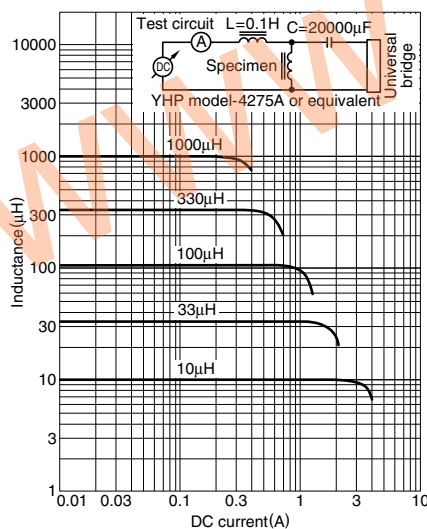
## ELECTRICAL CHARACTERISTICS

Inductance ( $\mu\text{H}$ )	Inductance tolerance	Test frequency L (kHz)	DC resistance ( $\Omega$ ) $\pm 20\%$	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
3.3	$\pm 30\%$	1	0.0161	4.9	3.7	SLF10145T-3R3N3R7-PF
5.6	$\pm 20\%$	1	0.0220	3.8	3.2	SLF10145T-5R6M3R2-PF
10	$\pm 20\%$	1	0.0364	3	2.5	SLF10145T-100M2R5-PF
15	$\pm 20\%$	1	0.0472	2.4	2.2	SLF10145T-150M2R2-PF
22	$\pm 20\%$	1	0.0591	2.1	1.9	SLF10145T-220M1R9-PF
33	$\pm 20\%$	1	0.0815	1.6	1.7	SLF10145T-330M1R6-PF
47	$\pm 20\%$	1	0.1	1.4	1.5	SLF10145T-470M1R4-PF
68	$\pm 20\%$	1	0.14	1.2	1.3	SLF10145T-680M1R2-PF
100	$\pm 20\%$	1	0.2	1	1.1	SLF10145T-101M1R0-PF
150	$\pm 20\%$	1	0.35	0.79	0.81	SLF10145T-151MR79-PF
220	$\pm 20\%$	1	0.47	0.65	0.7	SLF10145T-221MR65-PF
330	$\pm 20\%$	1	0.68	0.54	0.58	SLF10145T-331MR54-PF
470	$\pm 20\%$	1	1.03	0.47	0.47	SLF10145T-471MR47-PF
680	$\pm 20\%$	1	1.6	0.38	0.38	SLF10145T-681MR38-PF
1000	$\pm 20\%$	1	2.8	0.32	0.29	SLF10145T-102MR29-PF
1500	$\pm 20\%$	1	3.4	0.22	0.26	SLF10145T-152MR22-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 30°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 1kHz/0.5V)  
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

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



• All specifications are subject to change without notice.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF10165

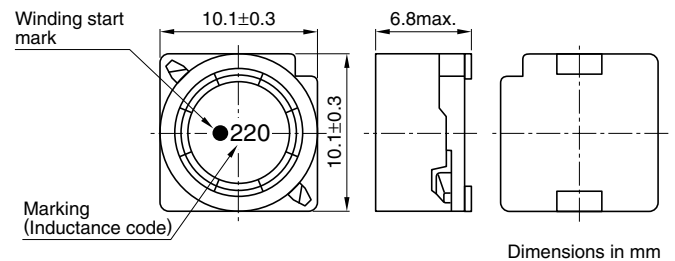
#### FEATURES

- Miniature size  
Mount area: 10.1×10.1mm  
Height: 6.8mm max.
- Generic use for portable DC to DC converter line.
- High magnetic shield construction should actualize high resolution for EMC protection.
- Available for automatic mounting in tape and reel package.
- The products do not contain lead and support lead-free soldering.

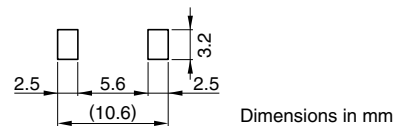
#### APPLICATIONS

TVs, PDPs, notebook PCs, portable DVD players, terminal adapters, amusement games, LCD monitors, digital audios, etc.

#### SHAPES AND DIMENSIONS



#### RECOMMENDED PC BOARD PATTERN



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance(%)	Test frequency (kHz)	DC resistance (mΩ)	Rated current(A)*	
					Based on inductance change typ.	Based on temperature rise typ.
SLF10165T-1R5N6R83PF	1.5	±30	100	6.7±30%	10.7	6.8
SLF10165T-2R2N6R33PF	2.2	±30	100	8.4±30%	8.9	6.3
SLF10165T-3R3N5R83PF	3.3	±30	100	9.6±30%	7.8	5.8
SLF10165T-4R7N4R73PF	4.7	±30	100	11.7±30%	6.1	4.7
SLF10165T-6R8N4R33PF	6.8	±30	100	14±30%	4.6	4.3
SLF10165T-100M3R83PF	10	±20	100	18.5±20%	4.1	3.8
SLF10165T-150M3R13PF	15	±20	100	27±20%	3.1	3.1
SLF10165T-220M2R43PF	22	±20	100	44.8±20%	2.7	2.4

\* Rated current: Value obtained when current flows and the temperature has risen to 30°C or when DC current flows and the nominal value of inductance has fallen by 10%, whichever is smaller.

- Operating temperature range: -40 to +105°C (Including self-temperature rise)

• 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.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF12555

#### 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.

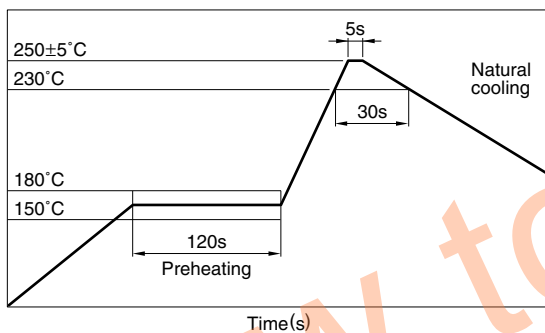
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	12555	T	220	M	2R3	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

12555	12.5×12.5×5.5mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

6R0	6μH
100	10μH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R9	1.9A
R88	0.88A

(7) Lead-free compatible product

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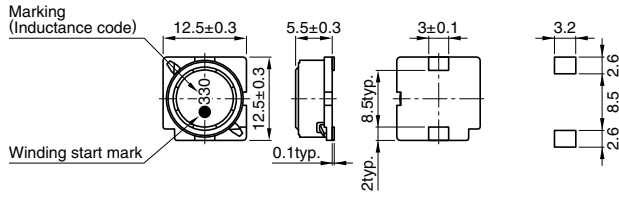
#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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



Weight: 2.6g  
Dimensions in mm

### ELECTRICAL CHARACTERISTICS

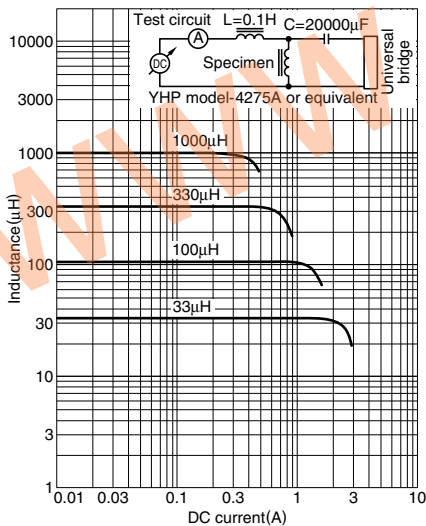
Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
6	±30%	1	0.0164	3.6	4.9	SLF12555T-6R0N3R6-PF
10	±20%	1	0.0215	3.4	4.3	SLF12555T-100M3R4-PF
15	±20%	1	0.0259	2.8	3.9	SLF12555T-150M2R8-PF
22	±20%	1	0.0338	2.3	3.4	SLF12555T-220M2R3-PF
33	±20%	1	0.0415	1.9	3.1	SLF12555T-330M1R9-PF
47	±20%	1	0.0618	1.6	2.5	SLF12555T-470M1R6-PF
68	±20%	1	0.0832	1.3	2.2	SLF12555T-680M1R3-PF
100	±20%	1	0.117	1.1	1.8	SLF12555T-101M1R1-PF
150	±20%	1	0.19	0.88	1.4	SLF12555T-151MR8-PF
220	±20%	1	0.27	0.72	1.2	SLF12555T-221MR72-PF
330	±20%	1	0.41	0.59	1	SLF12555T-331MR59-PF
470	±20%	1	0.52	0.49	0.88	SLF12555T-471MR49-PF
680	±20%	1	0.76	0.43	0.73	SLF12555T-681MR43-PF
1000	±20%	1	1.12	0.34	0.6	SLF12555T-102MR34-PF
1500	±20%	1	1.73	0.29	0.48	SLF12555T-152MR29-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 30°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 1kHz/0.5V)  
Rdc:MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

### TYPICAL ELECTRICAL CHARACTERISTICS

#### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



• All specifications are subject to change without notice.



# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF12565

#### 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.

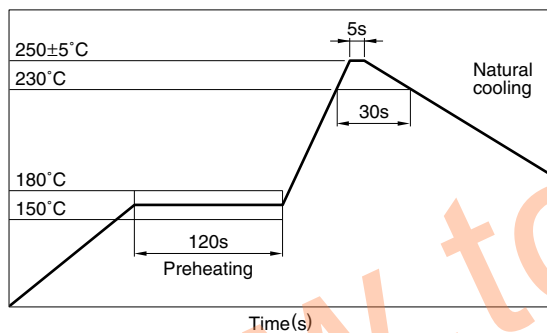
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	12565	T	220	M	3R5	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

12565	12.5×12.5×6.5mm (L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

2R0	2μH
100	10μH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R6	1.6A
3R5	3.5A

(7) Lead-free compatible product

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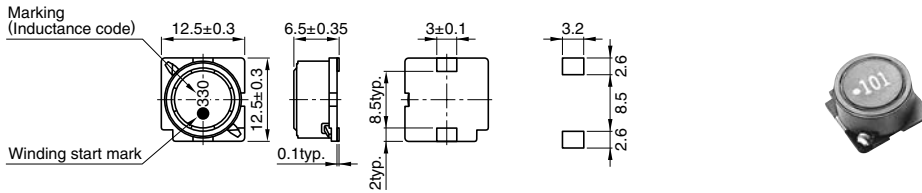
#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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

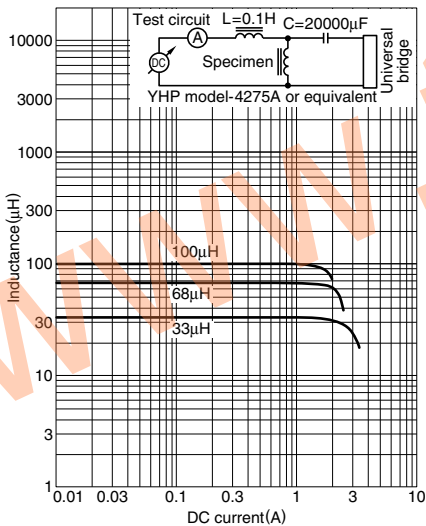
Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
2	±30%	1	0.0117	10	6.2	SLF12565T-2R0N6R2-PF
4.2	±30%	1	0.015	7.3	5.5	SLF12565T-4R2N5R5-PF
7	±30%	1	0.0177	5.7	5	SLF12565T-7R0N5R0-PF
10	±20%	1	0.0202	5	4.8	SLF12565T-100M4R8-PF
15	±20%	1	0.0237	4.2	4.4	SLF12565T-150M4R2-PF
22	±20%	1	0.0316	3.5	3.8	SLF12565T-220M3R5-PF
33	±20%	1	0.0406	2.8	3.4	SLF12565T-330M2R8-PF
47	±20%	1	0.0578	2.4	2.8	SLF12565T-470M2R4-PF
68	±20%	1	0.0787	2	2.4	SLF12565T-680M2R0-PF
100	±20%	1	0.123	1.6	1.9	SLF12565T-101M1R6-PF
220	±20%	1	0.273	1	1.2	SLF12565T-221M1R0-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 40°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 1kHz/0.5V)  
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



• All specifications are subject to change without notice.

# Inductors for Power Circuits

## Wound/STD • Magnetic Shielded

Conformity to RoHS Directive

### SLF Series SLF12575

#### 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.

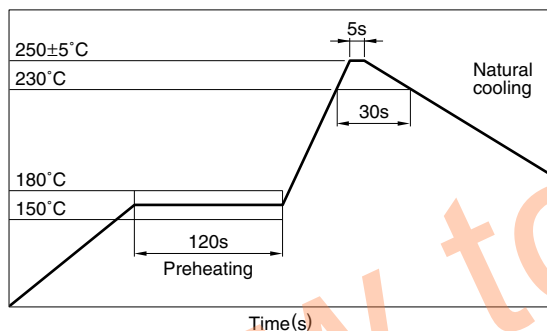
#### APPLICATIONS

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

#### SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C[Unit of products]

#### RECOMMENDED REFLOW SOLDERING CONDITIONS



#### PRODUCT IDENTIFICATION

SLF	12575	T	220	M	3R2	- PF
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

12575	12.5×12.5×7.5mm (L×W×T)
-------	-------------------------

(3) Packaging style

T	Taping(reel)
---	--------------

(4) Inductance value

3R3	3.3μH
100	10μH

(5) Inductance tolerance

M	±20%
N	±30%

(6) Rated current

1R9	1.9A
3R2	3.2A

(7) Lead-free compatible product

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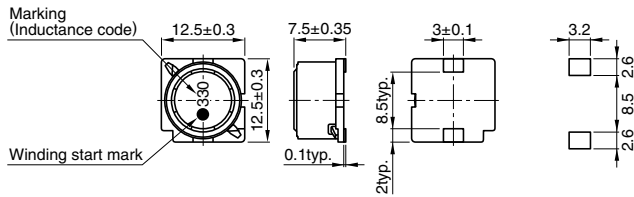
#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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



Weight: 3.6g

Dimensions in mm

## ELECTRICAL CHARACTERISTICS

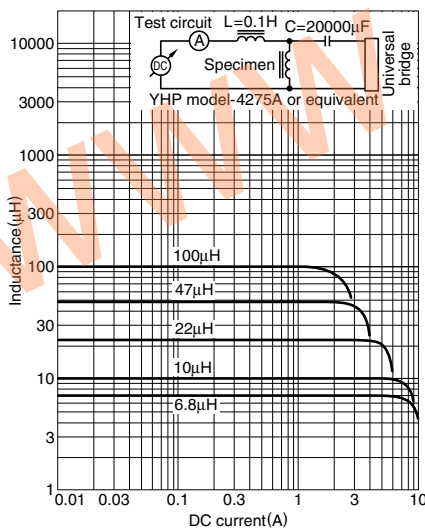
Inductance (μH)	Inductance tolerance	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)* max.		Part No.
				Based on inductance change	Based on temperature rise	
1.2	±30%	1	0.0069	13	8.2	SLF12575T-1R2N8R2-PF
2.7	±30%	1	0.0094	10	7	SLF12575T-2R7N7R0-PF
3.9	±30%	1	0.0104	9	6.7	SLF12575T-3R9N6R7-PF
5.6	±30%	1	0.0116	7.8	6.3	SLF12575T-5R6N6R3-PF
6.8	±30%	1	0.0131	7.2	5.9	SLF12575T-6R8N5R9-PF
10	±20%	1	0.0156	5.5	5.4	SLF12575T-100M5R4-PF
15	±20%	1	0.0184	4.7	5	SLF12575T-150M4R7-PF
22	±20%	1	0.0263	4	4	SLF12575T-220M4R0-PF
33	±20%	1	0.0395	3.2	3.4	SLF12575T-330M3R2-PF
47	±20%	1	0.0528	2.7	3	SLF12575T-470M2R7-PF
68	±20%	1	0.0778	2	2.4	SLF12575T-680M2R0-PF
100	±20%	1	0.125	1.9	1.9	SLF12575T-101M1R9-PF
150	±20%	1	0.175	1.5	1.6	SLF12575T-151M1R5-PF
220	±20%	1	0.258	1.3	1.3	SLF12575T-221M1R3-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 40°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 1kHz/0.5V)  
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

### INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



• All specifications are subject to change without notice.