

SLF Series

SMD Power Inductors

APPLICATIONS

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

OUTLINE

SLF series is designed for low profile type with low Rdc and large current.

Its magnetic shielded type is suitable for high-density mounting and flat bottom surface allows for reliable mounting onto the board.

Soldering conditions can be easily confirmed when mounting onto the board.

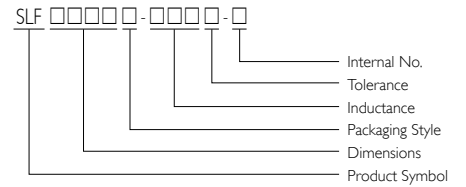
This series also provides customers with embossed carrier type packaging for automatic mounting machines.

FEATURES

Low Resistance and High Currents



PRODUCT IDENTIFICATION



- Packaging: T = Tape and Reel
- Internal No.: N = Lead-Free



SHAPES AND DIMENSIONS

Unit: mm

Figure 1

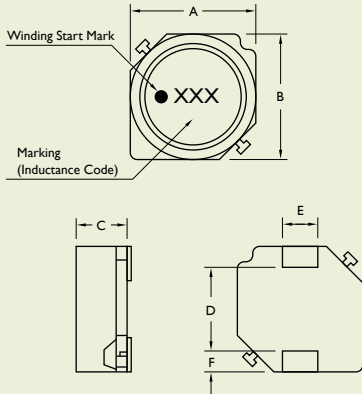


Figure 2

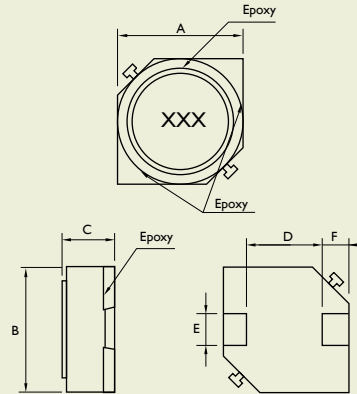
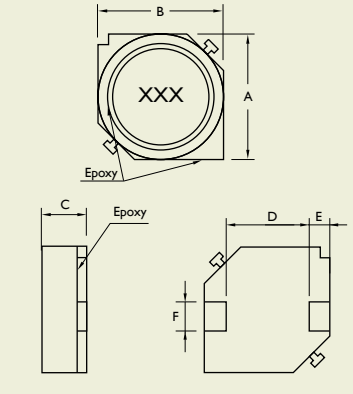


Figure 3



TYPE	FIGURE	A	B	C	D	E	F
SLF0628	1	6 ± 0.2	6 ± 0.2	2.8 ± 0.2	3.0 typ	2 ± 0.1	1.5 typ
SLF0728	1	7 ± 0.2	7 ± 0.2	2.8 ± 0.2	4.9 typ	2.0 typ	0.9 typ
SLF0730	1	7 ± 0.2	7 ± 0.2	3.0 ± 0.2	4.9 typ	2.0 typ	0.9 typ
SLF0732	1	7 ± 0.2	7 ± 0.2	3.2 ± 0.2	4.9 typ	2.0 typ	0.9 typ
SLF0745	1	7 ± 0.2	7 ± 0.2	4.5 ± 0.3	4.9 typ	2.0 typ	0.9 typ
SLF1045	2	10.1 ± 0.3	10.1 ± 0.3	4.5 ± 0.3	6.0 typ	3.0 typ	2.0 typ
SLF1055	2	10.1 ± 0.3	10.1 ± 0.3	5.5 ± 0.3	6.0 typ	3.0 typ	2.0 typ
SLF1255	3	12.5 ± 0.3	12.5 ± 0.3	5.5 ± 0.3	8.6 typ	3.0 typ	2.0 typ
SLF1265	3	12.5 ± 0.3	12.5 ± 0.3	6.5 ± 0.35	8.6 typ	3.0 typ	2.0 typ
SLF1275	3	12.5 ± 0.3	12.5 ± 0.3	7.5 ± 0.35	8.6 typ	3.0 typ	2.0 typ

ELECTRICAL CHARACTERISTICS SLF0628

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF0628T-4R7M-N	4.7	20	I	0.0284	1.60	2.50
SLF0628T-6R8M-N	6.8	20	I	0.0354	1.50	2.20
SLF0628T-100M-N	10	20	I	0.0532	1.30	1.80
SLF0628T-150M-N	15	20	I	0.0745	1.00	1.40
SLF0628T-220M-N	22	20	I	0.104	0.77	1.30
SLF0628T-330M-N	33	20	I	0.148	0.69	1.10
SLF0628T-470M-N	47	20	I	0.210	0.59	0.92
SLF0628T-680M-N	68	20	I	0.290	0.50	0.78
SLF0628T-101M-N	100	20	I	0.430	0.42	0.64

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 30%.

Itemp Current: Value obtained when current flows and the temperature has risen by 25 °C.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLF0728

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.
SLF0728T-3R3M-N	3.3	20	I	0.037	1.60
SLF0728T-4R7M-N	4.7	20	I	0.045	1.50
SLF0728T-6R8M-N	6.8	20	I	0.059	1.30
SLF0728T-100M-N	10	20	I	0.083	1.10
SLF0728T-150M-N	15	20	I	0.130	0.88
SLF0728T-220M-N	22	20	I	0.180	0.75
SLF0728T-330M-N	33	20	I	0.240	0.65
SLF0728T-470M-N	47	20	I	0.340	0.54

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC



ELECTRICAL CHARACTERISTICS SLF0730

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.
SLF0730T-3R3M-N	3.3	20		0.023	1.80
SLF0730T-4R7M-N	4.7	20		0.036	1.60
SLF0730T-6R8M-N	6.8	20		0.041	1.50
SLF0730T-100M-N	10	20		0.053	1.30
SLF0730T-150M-N	15	20		0.084	1.00
SLF0730T-220M-N	22	20		0.110	0.86
SLF0730T-330M-N	33	20		0.160	0.65
SLF0730T-470M-N	47	20		0.240	0.57
SLF0730T-680M-N	68	20		0.310	0.49
SLF0730T-101M-N	100	20		0.450	0.35

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLF0732

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.
SLF0732T-2R2M-N	2.2	20		0.018	2.10
SLF0732T-3R3M-N	3.3	20		0.023	1.90
SLF0732T-4R7M-N	4.7	20		0.036	1.70
SLF0732T-6R8M-N	6.8	20		0.041	1.60
SLF0732T-100M-N	10	20		0.053	1.40
SLF0732T-150M-N	15	20		0.075	1.10
SLF0732T-220M-N	22	20		0.11	0.96
SLF0732T-330M-N	33	20		0.16	0.75
SLF0732T-470M-N	47	20		0.24	0.67
SLF0732T-680M-N	68	20		0.31	0.59
SLF0732T-101M-N	100	20		0.45	0.45
SLF0732T-151M-N	150	20		0.65	0.37
SLF0732T-221M-N	220	20		1.05	0.29
SLF0732T-331M-N	330	20		1.67	0.22
SLF0732T-471M-N	470	20		2.05	0.20
SLF0732T-681M-N	680	20		3.15	0.16
SLF0732T-102M-N	1000	20		4.78	0.13

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLF0745

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF0745T-3R3M-N	3.3	20	1	0.02	2.50	2.30
SLF0745T-4R7M-N	4.7	20	1	0.03	2.00	2.10
SLF0745T-6R8M-N	6.8	20	1	0.039	1.70	1.74
SLF0745T-100M-N	10	20	1	0.036	1.30	1.78
SLF0745T-150M-N	15	20	1	0.052	1.10	1.53
SLF0745T-220M-N	22	20	1	0.061	0.90	1.34
SLF0745T-330M-N	33	20	1	0.096	0.82	1.09
SLF0745T-470M-N	47	20	1	0.125	0.75	0.92
SLF0745T-680M-N	68	20	1	0.175	0.60	0.77
SLF0745T-101M-N	100	20	1	0.25	0.50	0.65
SLF0745T-151M-N	150	20	1	0.34	0.40	0.55
SLF0745T-221M-N	220	20	1	0.52	0.33	0.45
SLF0745T-331M-N	330	20	1	0.74	0.25	0.37
SLF0745T-471M-N	470	20	1	1.05	0.22	0.31
SLF0745T-681M-N	680	20	1	1.48	0.20	0.27
SLF0745T-102M-N	1000	20	1	2.28	0.14	0.25

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp Current: Value obtained when current flows and the temperature has risen to 20 °C.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLF1045

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF1045T-100M-N	10	20	1	0.0364	3.00	2.50
SLF1045T-150M-N	15	20	1	0.0472	2.40	2.20
SLF1045T-220M-N	22	20	1	0.0591	2.10	1.90
SLF1045T-330M-N	33	20	1	0.0815	1.60	1.70
SLF1045T-470M-N	47	20	1	0.10	1.40	1.50
SLF1045T-680M-N	68	20	1	0.14	1.20	1.30
SLF1045T-101M-N	100	20	1	0.20	1.00	1.10
SLF1045T-151M-N	150	20	1	0.35	0.79	0.81
SLF1045T-221M-N	220	20	1	0.47	0.65	0.70
SLF1045T-331M-N	330	20	1	0.68	0.54	0.58
SLF1045T-471M-N	470	20	1	1.03	0.47	0.47
SLF1045T-681M-N	680	20	1	1.60	0.38	0.38
SLF1045T-102M-N	1000	20	1	2.80	0.32	0.29
SLF1045T-152M-N	1500	20	1	3.40	0.22	0.26

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp Current: Value obtained when current flows and the temperature has risen to 30 °C.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC



ELECTRICAL CHARACTERISTICS SLF1055

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.
SLF1055T-100M-N	10	20	1	40	3.5
SLF1055T-330M-N	33	20	1	85	2.1

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 15%.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLF1255

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLF1255T-6R0M-N	6	20	1	0.0164	3.60	4.90
SLF1255T-100M-N	10	20	1	0.0215	3.40	4.30
SLF1255T-150M-N	15	20	1	0.0259	2.80	3.90
SLF1255T-220M-N	22	20	1	0.0338	2.30	3.40
SLF1255T-330M-N	33	20	1	0.0415	1.90	3.10
SLF1255T-470M-N	47	20	1	0.0618	1.60	2.50
SLF1255T-680M-N	68	20	1	0.0832	1.30	2.20
SLF1255T-101M-N	100	20	1	0.117	1.10	1.80
SLF1255T-151M-N	150	20	1	0.190	0.88	1.40
SLF1255T-221M-N	220	20	1	0.270	0.72	1.20
SLF1255T-331M-N	330	20	1	0.410	0.59	1.00
SLF1255T-471M-N	470	20	1	0.520	0.49	0.88
SLF1255T-681M-N	680	20	1	0.760	0.43	0.73
SLF1255T-102M-N	1000	20	1	1.120	0.34	0.60
SLF1255T-152M-N	1500	20	1	1.730	0.29	0.48

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp Current: Value obtained when current flows and the temperature has risen to 30 °C.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLFI265

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLFI265T-2R0T-N	2.0	30	I	0.0117	10	6.20
SLFI265T-4R2T-N	4.2	30	I	0.0150	7.3	5.50
SLFI265T-7R0T-N	7.0	30	I	0.0177	5.7	5.00
SLFI265T-100M-N	10	20	I	0.0202	5.0	4.80
SLFI265T-150M-N	15	20	I	0.0237	4.2	4.40
SLFI265T-220M-N	22	20	I	0.0316	3.5	3.80
SLFI265T-330M-N	33	20	I	0.0406	2.8	3.40
SLFI265T-470M-N	47	20	I	0.0578	2.4	2.80
SLFI265T-680M-N	68	20	I	0.0787	2.0	2.40
SLFI265T-101M-N	100	20	I	0.1230	1.6	1.90
SLFI265T-221M-N	220	20	I	0.2730	1.0	1.20

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

Itemp Current: Value obtained when current flows and the temperature has risen to 40 °C.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC

ELECTRICAL CHARACTERISTICS SLFI275

PART NO.	INDUCTANCE (μ H)	TOLERANCE (\pm %)	TEST FREQUENCY (KHz)	DC RESISTANCE (Ω) \pm 20%	RATED CURRENT (A) Max.	ITEMP (A) Max.
SLFI275T-1R2T-N	1.2	30	I	0.0069	13	8.20
SLFI275T-2R7T-N	2.7	30	I	0.0094	10	7.00
SLFI275T-3R9T-N	3.9	30	I	0.0104	9.0	6.70
SLFI275T-5R6T-N	5.6	30	I	0.0116	7.8	6.30
SLFI275T-6R8T-N	6.8	30	I	0.0131	7.2	5.90
SLFI275T-100M-N	10	20	I	0.0156	5.5	5.40
SLFI275T-150M-N	15	20	I	0.0184	4.7	5.00
SLFI275T-220M-N	22	20	I	0.0263	4.0	4.00
SLFI275T-330M-N	33	20	I	0.0395	3.2	3.40
SLFI275T-470M-N	47	20	I	0.0528	2.7	3.00
SLFI275T-680M-N	68	20	I	0.0778	2.0	2.40
SLFI275T-101M-N	100	20	I	0.1250	1.9	1.90
SLFI275T-151M-N	150	20	I	0.1750	1.5	1.60
SLFI275T-221M-N	220	20	I	0.2580	1.3	1.30

Note:

Rated Current: Value obtained when DC current flows and the initial value of inductance has fallen by 10%.

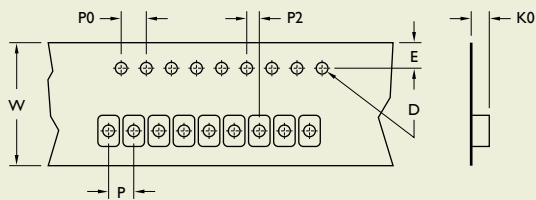
Itemp Current: Value obtained when current flows and the temperature has risen to 40 °C.

Test Equipment Inductance: HP4192A LF Impedance analyzer or equivalent (Test frequency: 1KHz/0.5V)

RDC: CH502BC



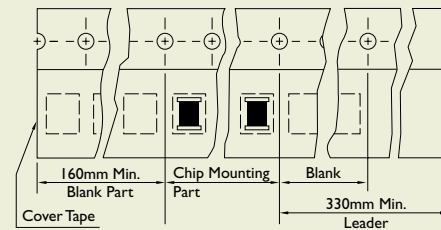
TAPE DIMENSIONS



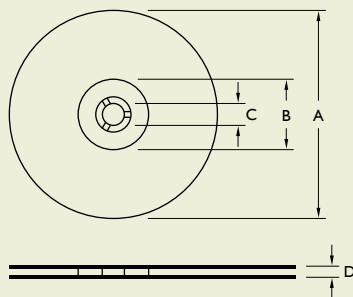
TAPE MATERIAL

Carrier Tape: Polystyrene

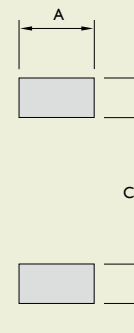
Carrier Tape: Polystyrene



REEL DIMENSIONS



RECOMMENDED PATTERN



Dimensions: mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY/ REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	A	B	C	D	
SLF0628	3.40	1.55	1.75	16	12	4	2	2.20	1.50	4.00	1.50	330	100	13	17.4	1,000
SLF0728	3.20	1.55	1.75	16	12	4	2	2.20	1.50	4.90	1.50	330	100	13	17.4	1,000
SLF0730	3.50	1.55	1.75	16	12	4	2	2.20	1.50	4.90	1.50	330	100	13	17.4	1,000
SLF0732	3.50	1.55	1.75	16	12	4	2	2.20	1.50	4.90	1.50	330	100	13	17.4	1,000
SLF0745	4.80	1.55	1.75	16	12	4	2	2.20	1.50	4.90	1.50	330	100	13	17.4	1,000
SLF1045	5.00	1.55	1.75	24	16	4	2	3.20	2.50	5.60	2.50	330	100	13	24.4	500
SLF1055	5.00	1.55	1.75	24	16	4	2	3.20	2.50	5.60	2.50	330	100	13	24.4	500
SLF1255	6.00	1.55	1.75	24	16	4	2	3.20	2.50	5.60	2.50	330	100	13	24.4	500
SLF1265	7.00	1.55	1.75	24	16	4	2	3.20	2.50	8.60	2.50	330	100	13	24.4	500
SLF1275	8.20	1.55	1.75	24	16	4	2	3.20	2.50	8.60	2.50	330	100	13	24.4	350