

APPROVAL SHEET

WLSN032D Series SMD Unshielded Power Inductors

*Contents in this sheet are subject to change without prior notice.

Features

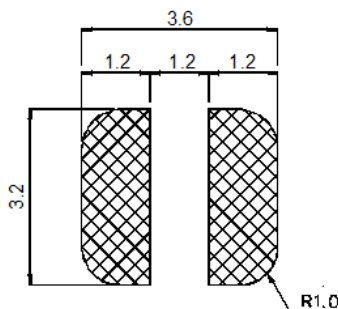
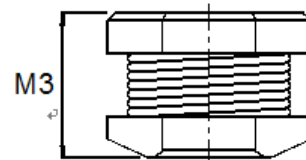
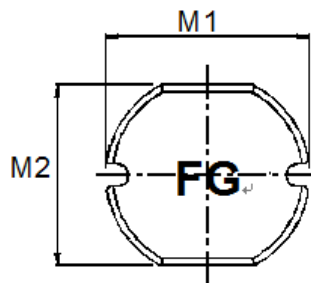
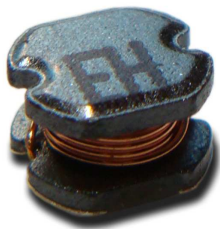
1. Unshielded power inductor.
2. Wide inductance range.

Applications

1. Inductor in DC/DC converter.
2. Use in STB、PDA、Notebook.

Shape and Dimension

Unit: mm



LAND PATTERNS
Recommended Patterns

	DIM.	TOL.
M1	3.3	±0.3
M2	3.0	±0.3
M3	2.1	±0.3

Ordering Information

WL	SN	032D	Z0	M	1R0	P	B
Product Code	Series	Dimensions	Series extension	Tolerance	Value	Packing Code	
WL: Inductor	SMD Unshielded Power Inductors	3.3 * 3.0 mm	Z0:STD	M: ± 20%	1R0 = 1.0uH 100 = 10.0uH	P=7" Reeled (Embossed tape)	B:STD

Electrical Characteristics

WLSN032D Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN032DZ0M1R0PB	BA	1.0	$\pm 20\%$	100	0.07	2.080
WLSN032DZ0M1R4PB	BC	1.4	$\pm 20\%$	100	0.09	1.860
WLSN032DZ0M1R8PB	BE	1.8	$\pm 20\%$	100	0.11	1.800
WLSN032DZ0M2R2PB	CC	2.2	$\pm 20\%$	100	0.13	1.390
WLSN032DZ0M2R7PB	CH	2.7	$\pm 20\%$	100	0.14	1.320
WLSN032DZ0M3R3PB	DD	3.3	$\pm 20\%$	100	0.20	1.250
WLSN032DZ0M3R9PB	DJ	3.9	$\pm 20\%$	100	0.21	1.200
WLSN032DZ0M4R7PB	EH	4.7	$\pm 20\%$	100	0.33	1.030
WLSN032DZ0M5R6PB	FG	5.6	$\pm 20\%$	100	0.35	0.910
WLSN032DZ0M6R8PB	GI	6.8	$\pm 20\%$	100	0.38	0.850
WLSN032DZ0M8R2PB	IC	8.2	$\pm 20\%$	100	0.43	0.820
WLSN032DZ0M100PB	KA	10	$\pm 20\%$	100	0.50	0.740
WLSN032DZ0M120PB	QA	12	$\pm 20\%$	100	0.65	0.640
WLSN032DZ0M150PB	MA	15	$\pm 20\%$	100	0.82	0.600
WLSN032DZ0M180PB	RA	18	$\pm 20\%$	100	0.90	0.540
WLSN032DZ0M220PB	LA	22	$\pm 20\%$	100	1.14	0.500
WLSN032DZ0M270PB	SA	27	$\pm 20\%$	100	1.39	0.430
WLSN032DZ0M330PB	NA	33	$\pm 20\%$	100	1.55	0.400
WLSN032DZ0M390PB	PA	39	$\pm 20\%$	100	2.15	0.370
WLSN032DZ0M470PB	OA	47	$\pm 20\%$	100	2.44	0.360
WLSN032DZ0M560PB	UA	56	$\pm 20\%$	100	2.68	0.310
WLSN032DZ0M680PB	VA	68	$\pm 20\%$	100	3.05	0.300
WLSN032DZ0M820PB	XA	82	$\pm 20\%$	100	3.48	0.280
WLSN032DZ0M221PB	LB	220	$\pm 20\%$	100	6.30	0.200
WLSN032DZ0M471PB	OB	470	$\pm 20\%$	100	14.00	0.090

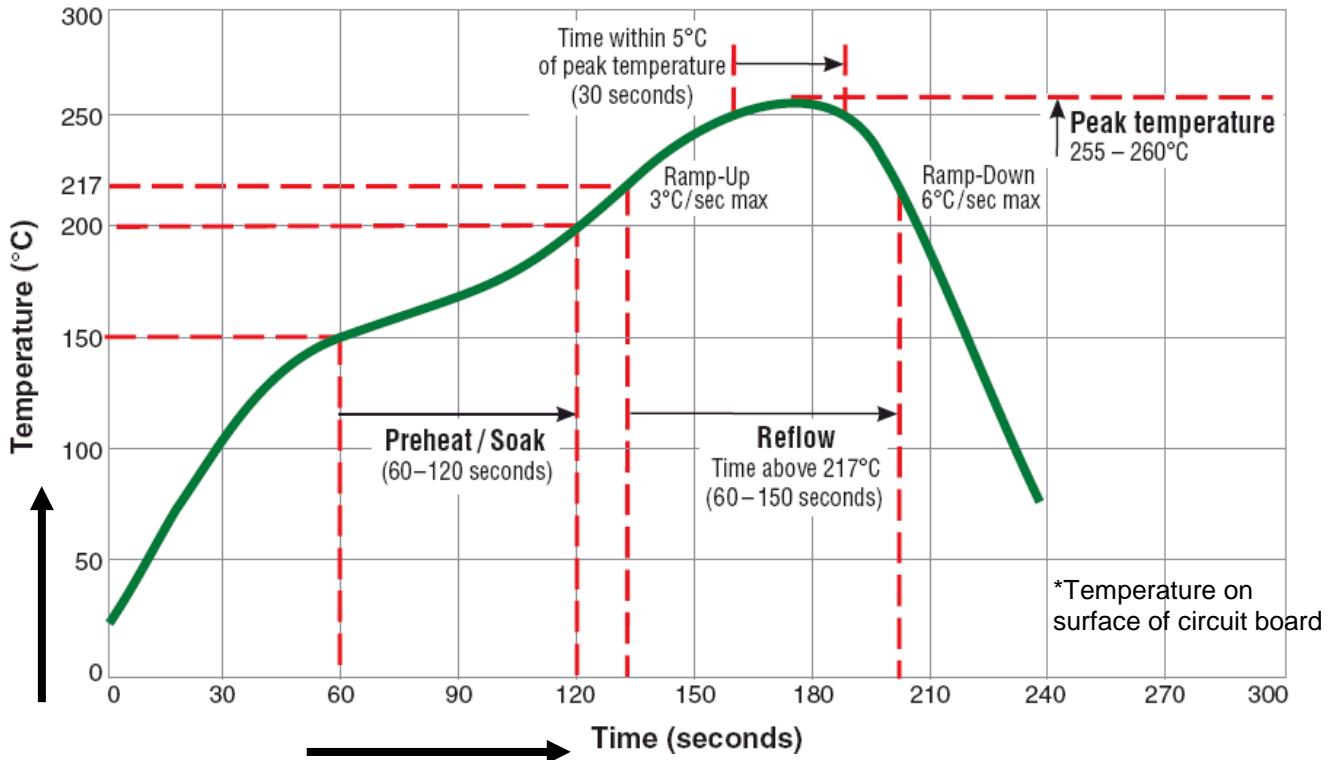
TEST INSTRUMENT: HP4284A、CHROMA 3302/1320/16502

* Inductance drops no more than 10 % of initial value at rated current ,temperature rises $\Delta t < 40^{\circ}\text{C}$.

*MSL : LEVEL 1

TYPICAL RoHS REFLOW PROFILE

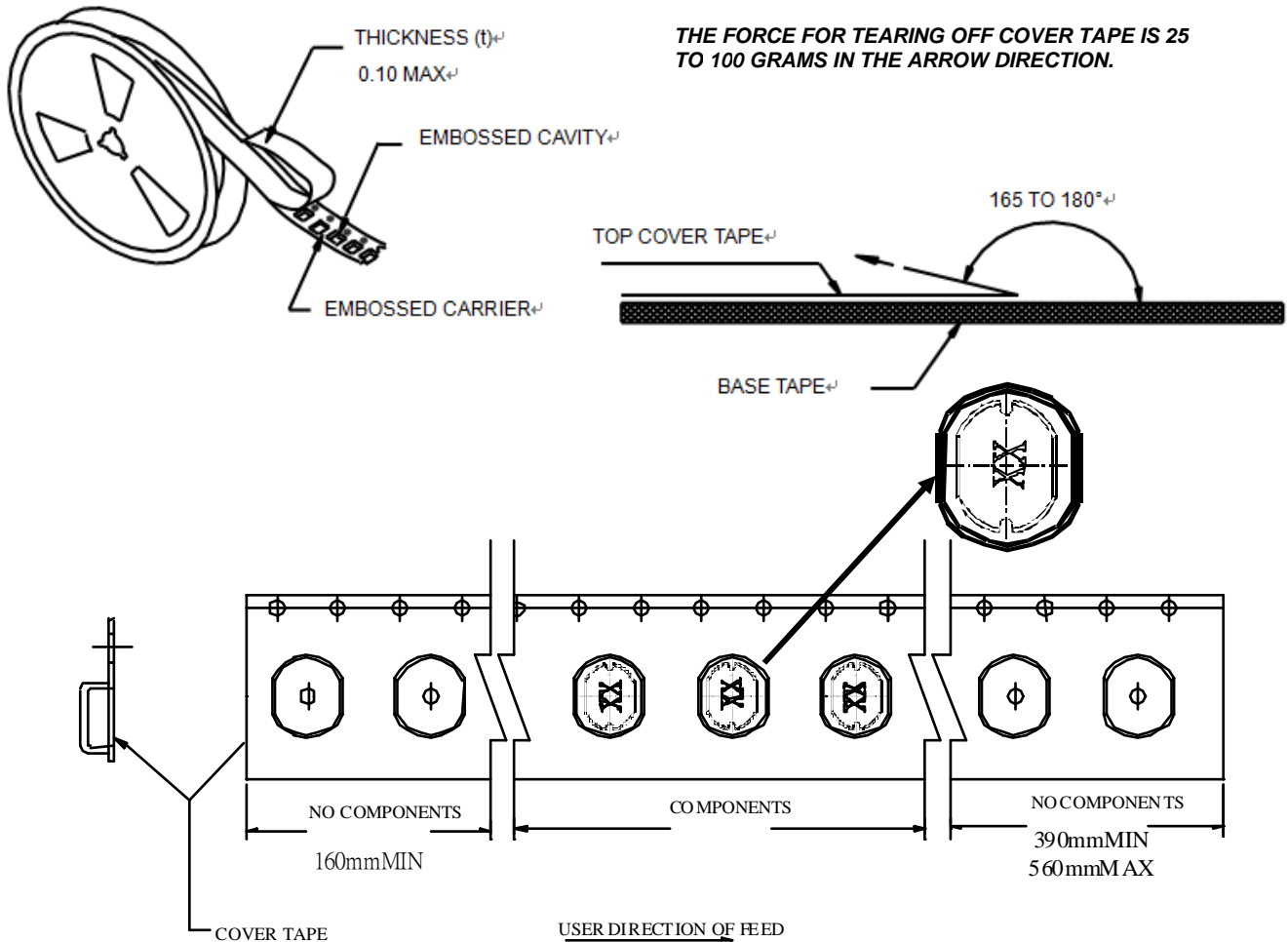
Typical RoHS Reflow Profile



Mechanical Performance /Environmental Test Performance Specifications:

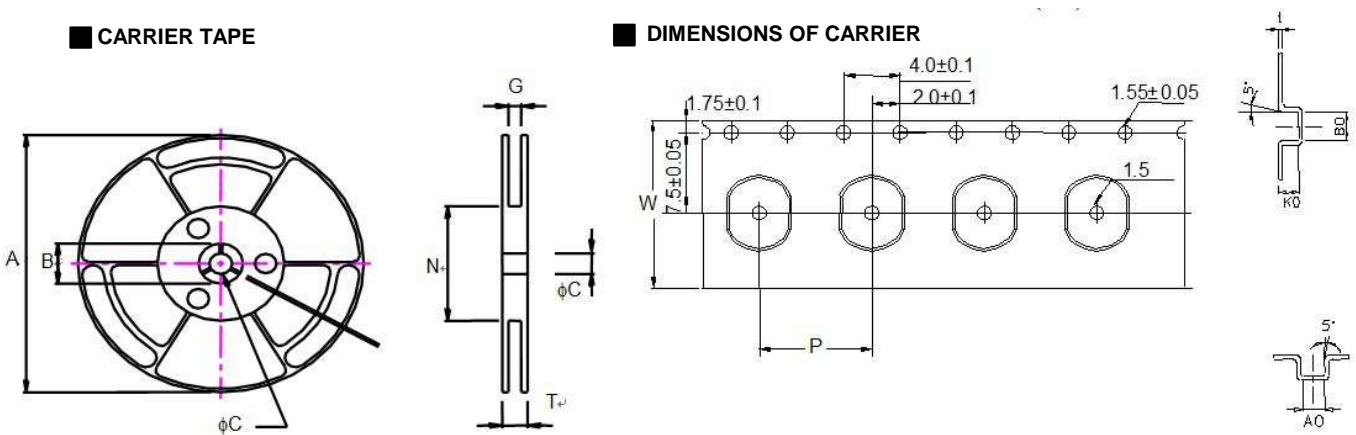
No.	Item	Test condition	Requirements
1	Salt Spray Test	Chamber temperature 35°C, the concentration of salt spray 5% (Total 24 hours).	MIL-STD-202G Method 101E Test Condition C
2	Humidity Test	+40°C ± 2°C, humidity of 90% ± 5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
3	High Temperature Storage	1. Temperature: 125, 100, 85, 70, 55, 40, 30°C. 2. Test time: 2, 16, 72, 96 hours.	IEC 68-2 Test Condition B
4	Low Temperature Storage	1 Temperature: -40, -25, -10. 2. Test time: 2, 16, 72, 96 hours.	IEC 68-2 Test Condition A
5	Thermal Shock	+125°C ± 5°C (30 minutes) ~ -40 ± 5°C (30 minutes), temperature switch time: 5 minutes (total 50 cycles).	MIL-STD-202G Method 107G Test Condition B-2
6	Life Test	+100°C ± 2°C (1000Hour)	MIL-STD-202G Method 108A Test Condition D
7	Vibration Test	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202G Method 201A
8	Solder Heat Resistance Test	DIP: Soak in 260°C solder pot, stay 10Sec Reflow: Keep 250 ± 5°C, 30 ± 5Sec in air, Temperature ramp: +1~4°C/sec; Above 183°C, must keep 90 s - 120 s.	MIL-STD-202G Method 210F Test Condition B(DIP) Test Condition (Reflow)
9	Terminal Pull Strength Test	1/2, 1, 2, 3, 5, 10 Pound, as products terminal feature.	MIL-STD-202G Method 211A Test Condition A
10	Solder Ability Test	Soak in 245 °C solder pot of 3Sec, PAD must have 95% above coverage.	J-STD-003B
11	Terminal Push Strength Test	No special requirements: 5N thrust to maintain 10 Sec.	JIS C5321:1997

Tape & Reel Packaging Dimensions:



■ CARRIER TAPE

■ DIMENSIONS OF CARRIER



	A	B	C	G	N	P	T	W	t	A0	B0	K0
DIM.	180	50	13	12.5	80	8.0	18.5	12.0	0.35	3.30	3.70	2.50
TOL.	MAX	± 0.8	$+0.5-0.2$	$+2-0$	MIN.	± 0.1	MAX	± 0.3	± 0.1	± 0.1	± 0.1	± 0.1

Quantity per reel : 0.5K pcs