

# APPROVAL SHEET



**WLSN032D Series**  
**SMD Unshielded Power Inductors**

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

## Features

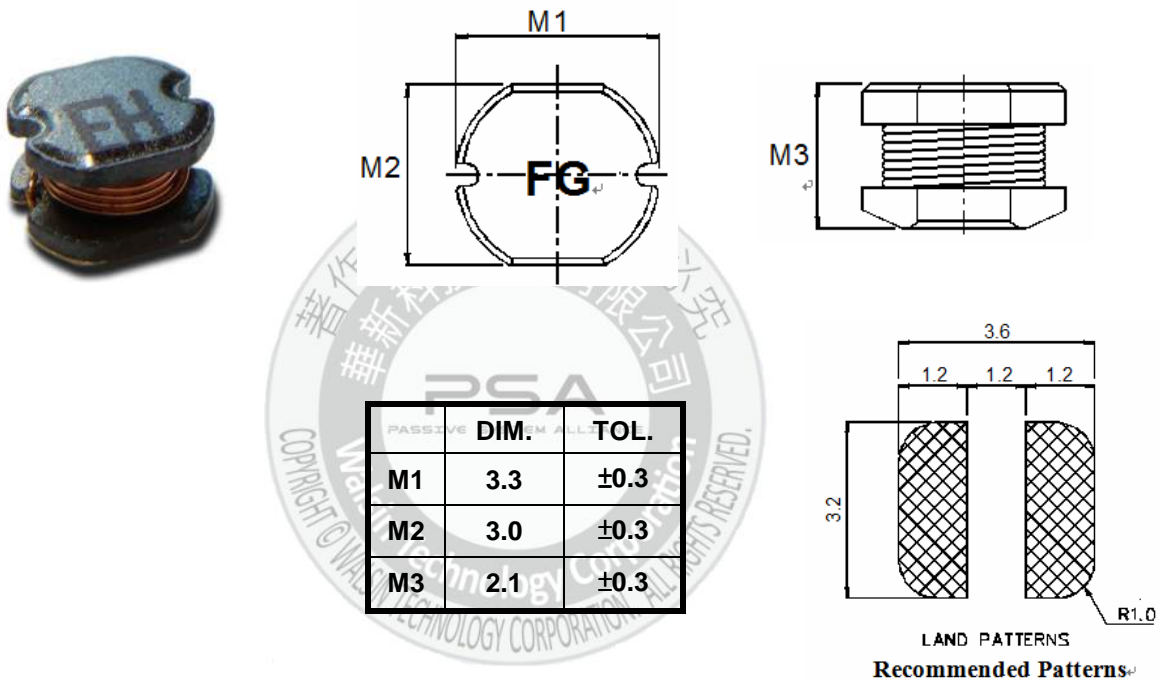
1. Unshielded power inductor.
2. Wide inductance range.

## Applications

1. Inductor in DC/DC converter.
2. Use in STB、Notebook、Radio、LCDs、other electrical devices.

## Shape and Dimension

Unit: mm



## Ordering Information

WL	SN	032D	Z0	M	1R0	P	B
<b>Product Code</b>	<b>Series</b>	<b>Dimensions</b>	<b>Series extension</b>	<b>Tolerance</b>	<b>Value</b>	<b>Packing Code</b>	
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

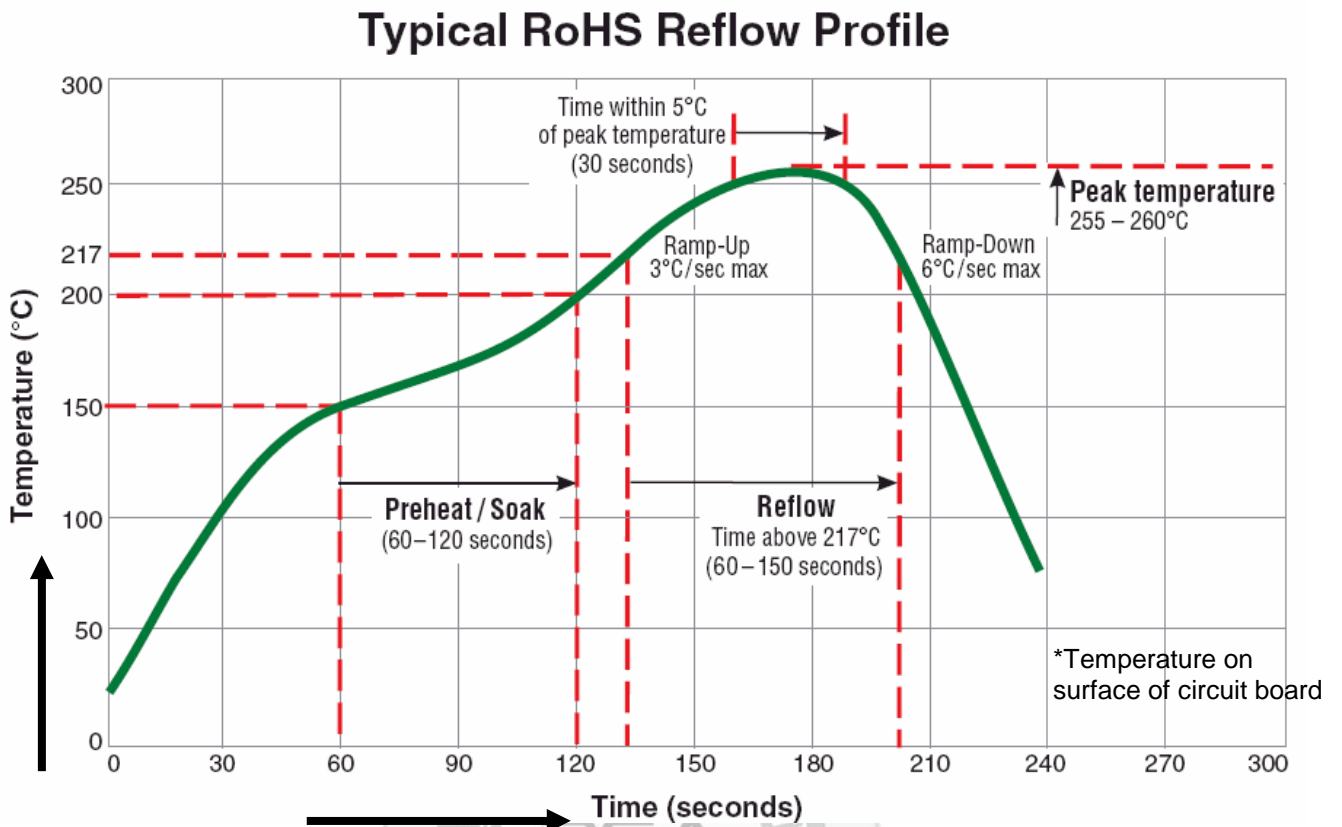
WLSN032D Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN032DZ0M1R0PB	BA	1.0	± 20%	100	0.07	2.080
WLSN032DZ0M1R4PB	BC	1.4	± 20%	100	0.09	1.860
WLSN032DZ0M1R8PB	BE	1.8	± 20%	100	0.11	1.800
WLSN032DZ0M2R2PB	CC	2.2	± 20%	100	0.13	1.390
WLSN032DZ0M2R7PB	CH	2.7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



## RELIABILITY PERFORMANCE

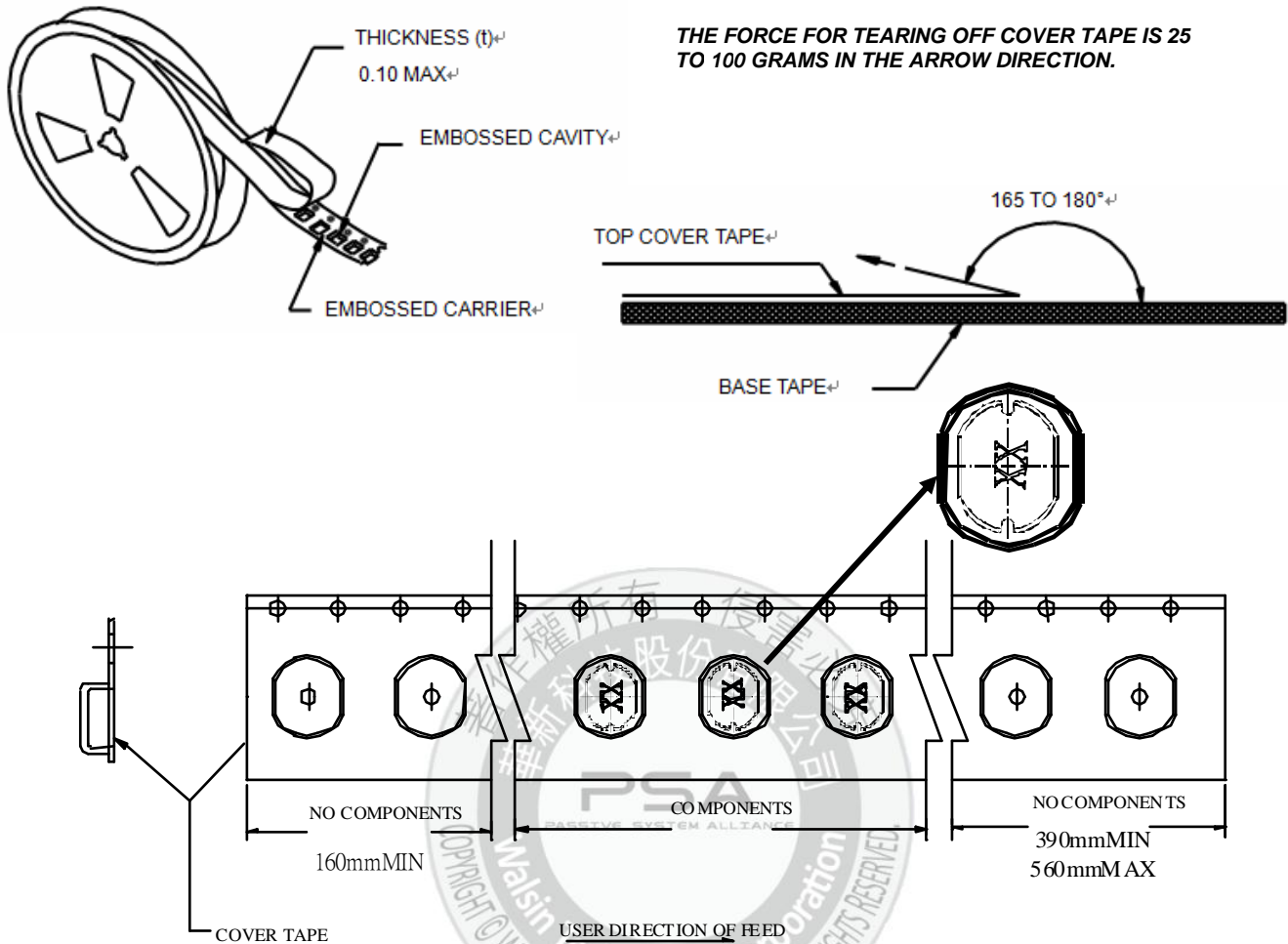
### Reliability Experiment For Electrical

Test Item	Test Condition	Standard Source
Humidity Test	+40°C ± 2°C, humidity of 90% ± 5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1. Temperature: +125°C ± 2°C 2. Test time: 48 ± 2hrs	IEC 68-2 Test Condition B
Low Temperature Test	1. Temperature: -40°C ± 2°C 2. Test time: 48 ± 2hrs	IEC 68-2 Test Condition A
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
Life Test	+70°C ± 5°C (250Hours)	MIL-STD-202G Method 108A Test Condition B

### Reliability Experiment For Physical

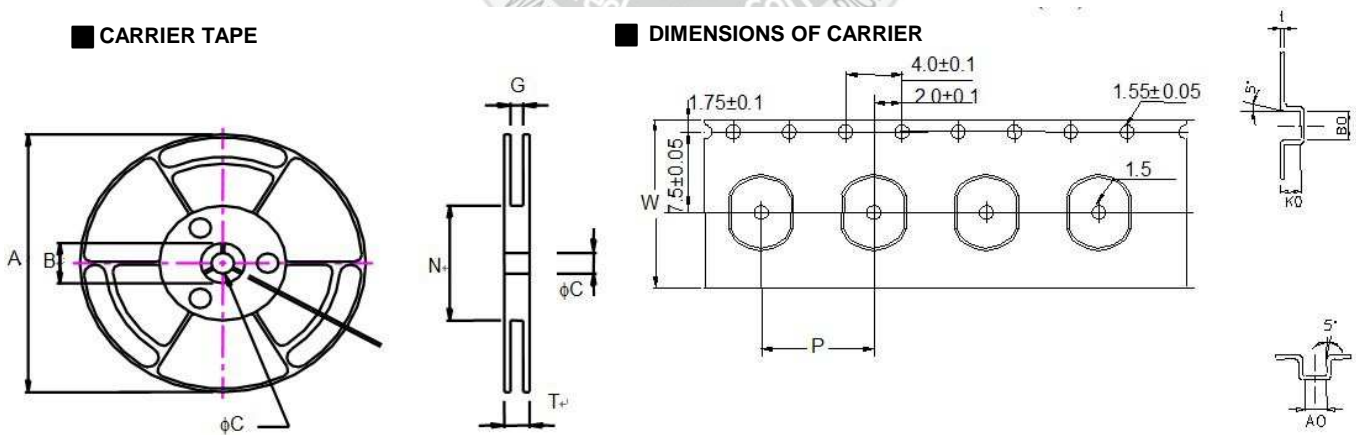
Test Item	Test Condition	Standard Source
Vibration Test	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202G Method 201A
Solder Heat Resistance Test	IR/convection reflow: Peak Temp 250 ± 5°C for 5Sec in air, Through 2 Cycle. Temperature Ramp: +1~4°C/sec; Above 183°C, must keep 90 s - 120 s	MIL-STD-202G Method 210F Test Condition (Reflow)
Solder Ability Test	Soak in 245 °C solder pot of 3Sec, PAD must have 95% above coverage.	J-STD-003B

### 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