

# APPROVAL SHEET



**WLSS125P Series**  
**Shielded SMD Power Inductors**

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

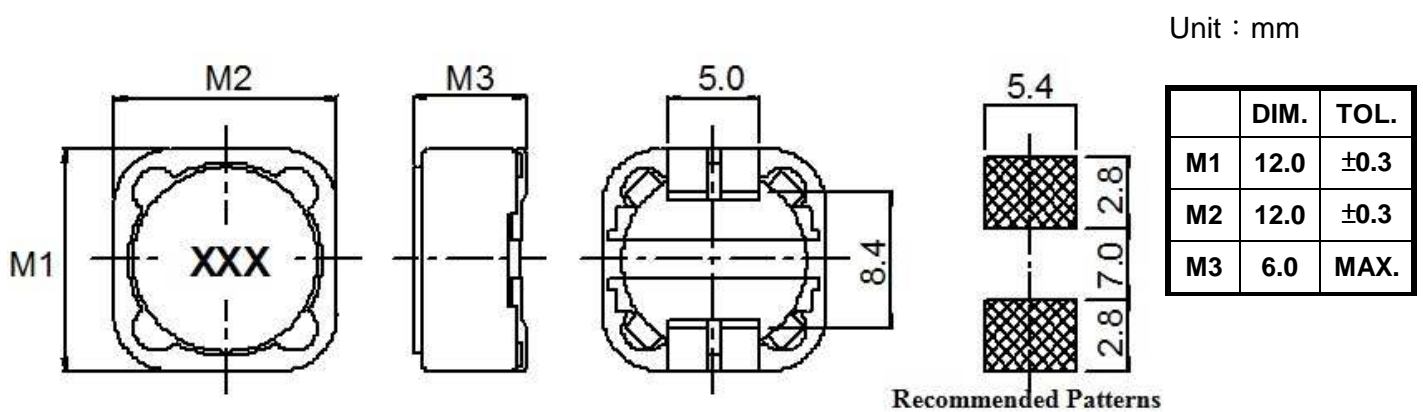
## Features

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

## Applications

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

## Shape and Dimension



## Ordering Information

WL	SS	125P	Z0	N	1R3	L	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	Shielded SMD Power Inductors	12 * 12 mm	Z0:STD	N:SPEC M: ± 20%	1R3 = 1.3uH 100 = 10.0uH 101 =100uH 102 =1000uH	L=13" Reeled (Embossed tape)	B:STD

### Electrical Characteristics

WLSS125P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSS125PZ0N1R3LB	1R3	1.3	30%,-20%	100	0.012	8
WLSS125PZ0N2R1LB	2R1	2.1	30%,-20%	100	0.014	7
WLSS125PZ0N3R1LB	3R1	3.1	30%,-20%	100	0.017	6
WLSS125PZ0N4R4LB	4R4	4.4	30%,-20%	100	0.02	5
WLSS125PZ0N5R8LB	5R8	5.8	30%,-20%	100	0.021	4.4
WLSS125PZ0N7R5LB	7R5	7.5	30%,-20%	100	0.024	4.2
WLSS125PZ0M100LB	100	10	±20%	1	0.025	4
WLSS125PZ0M120LB	120	12	±20%	1	0.027	3.5
WLSS125PZ0M150LB	150	15	±20%	1	0.03	3.3
WLSS125PZ0M180LB	180	18	±20%	1	0.034	3
WLSS125PZ0M220LB	220	22	±20%	1	0.036	2.8
WLSS125PZ0M270LB	270	27	±20%	1	0.051	2.3
WLSS125PZ0M330LB	330	33	±20%	1	0.057	2.1
WLSS125PZ0M390LB	390	39	±20%	1	0.068	2
WLSS125PZ0M470LB	470	47	±20%	1	0.075	1.8
WLSS125PZ0M560LB	560	56	±20%	1	0.11	1.7
WLSS125PZ0M680LB	680	68	±20%	1	0.12	1.5
WLSS125PZ0M820LB	820	82	±20%	1	0.14	1.4
WLSS125PZ0M101LB	101	100	±20%	1	0.16	1.3
WLSS125PZ0M121LB	121	120	±20%	1	0.17	1.1
WLSS125PZ0M151LB	151	150	±20%	1	0.23	1
WLSS125PZ0M181LB	181	180	±20%	1	0.29	0.9
WLSS125PZ0M221LB	221	220	±20%	1	0.4	0.8
WLSS125PZ0M271LB	271	270	±20%	1	0.46	0.75
WLSS125PZ0M331LB	331	330	±20%	1	0.51	0.68
WLSS125PZ0M391LB	391	390	±20%	1	0.69	0.65
WLSS125PZ0M471LB	471	470	±20%	1	0.77	0.58
WLSS125PZ0M561LB	561	560	±20%	1	0.86	0.54
WLSS125PZ0M681LB	681	680	±20%	1	1.2	0.48
WLSS125PZ0M821LB	821	820	±20%	1	1.34	0.43
WLSS125PZ0M102LB	102	1000	±20%	1	1.53	0.4

a. Tolerance : N: SPEC ,M : ±20%

b. Operating Temp : -25°C to +105°C.

c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502

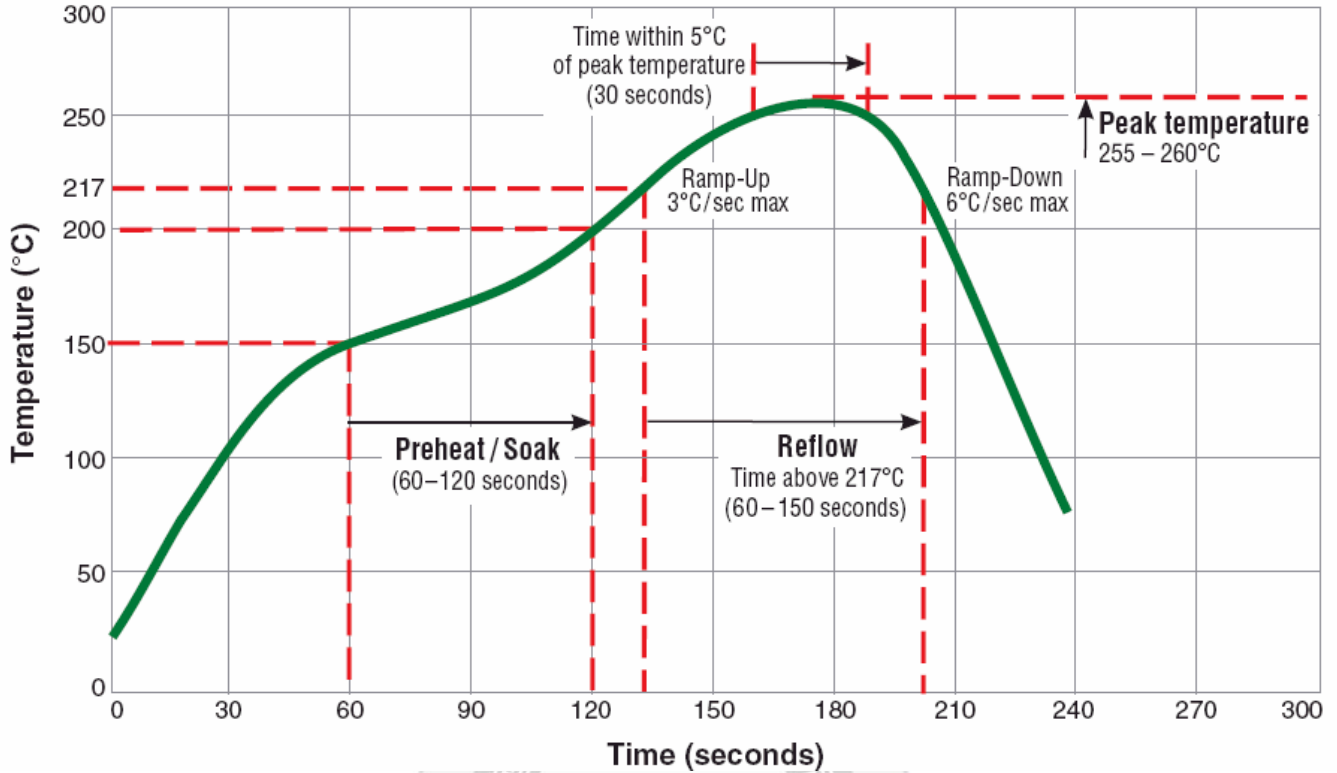
d. DCR measured using the 502BC milli-ohm meter.

e. Inductance drops no more than 25% 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



RELIABILITY PERFORMANCE

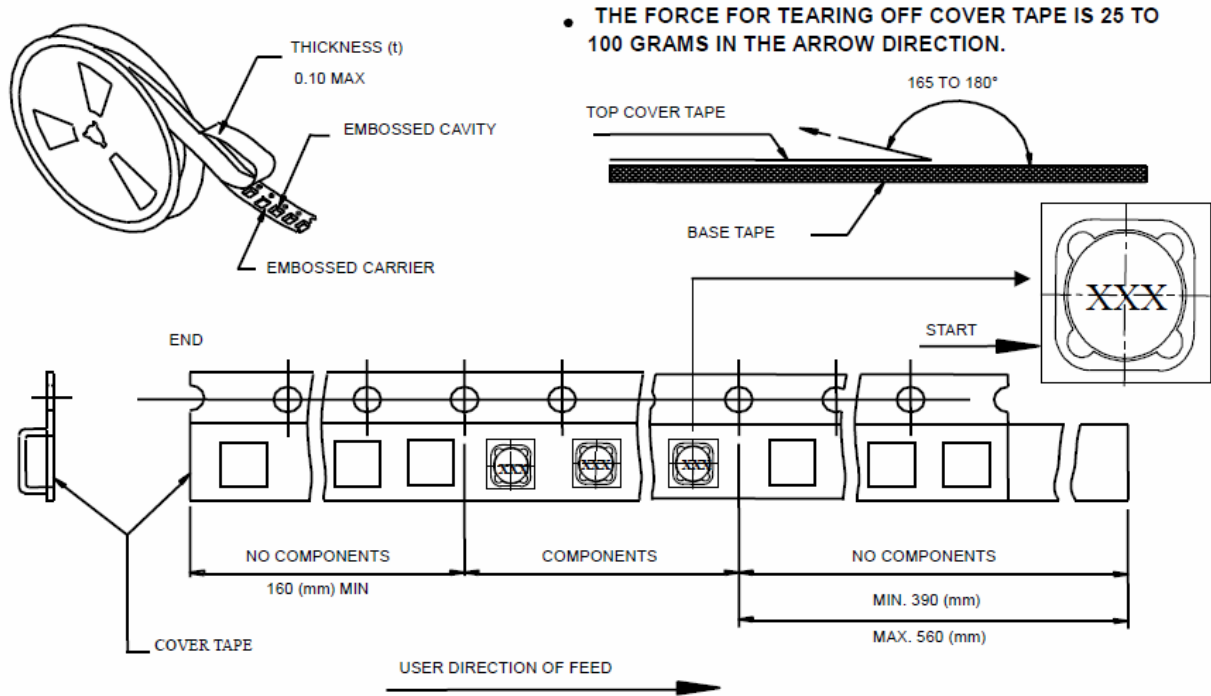
Reliability Experiment For Electrical

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

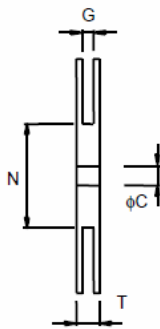
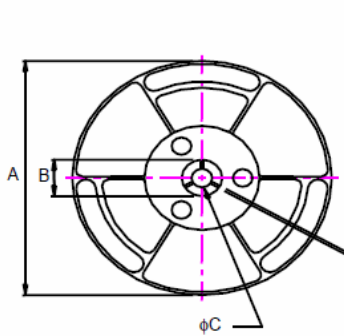
Test Item	Test Condition	Standard Source
Vibration Test	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202G Method 201A
Solder Heat Resistance Test	IR/convection reflow: Peak Temp 250 ± 5°C for 5Sec in air, Through 2 Cycle. Temperature Ramp: +1 ~ 4°C/sec; 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:

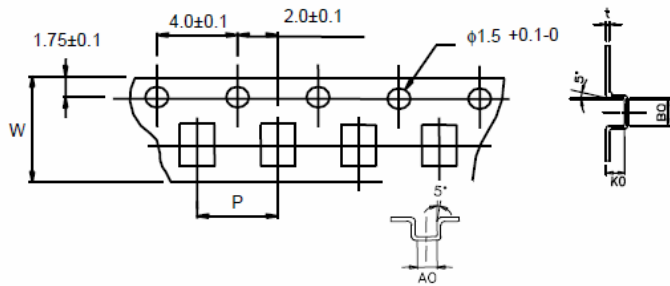


#### ■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



#### ■ DIMENSIONS OF CARRIER TAPE (mm)



Unit : mm

	A	B	C	G	N	P	T	W	t	A0	B0	K0
DIM.	340	20.2	13.0	25.0	100	16.0	30.5	24.0	0.35	12.5	12.5	5.2
TOL.	MAX	MIN	±0.5	+1 -0.5	REF	±0.1	MAX	±0.3	±0.05	±0.1	±0.1	±0.1

Quantity per reel : 500 pcs