

# APPROVAL SHEET



**WLSS214P Series**  
**Shielded SMD Power Inductors**

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

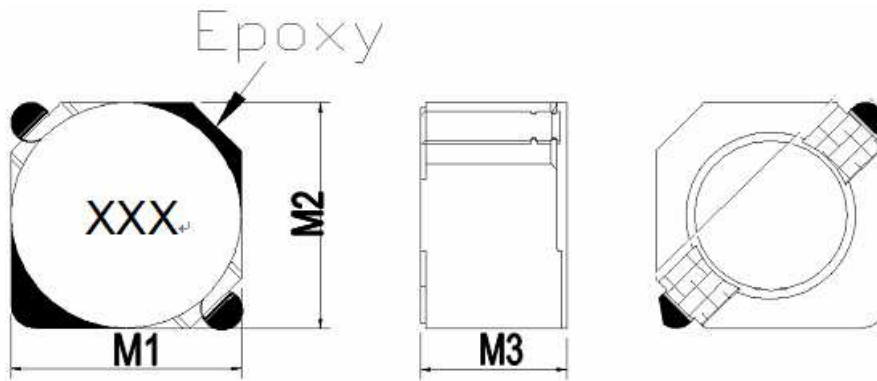
## Features

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

## Applications

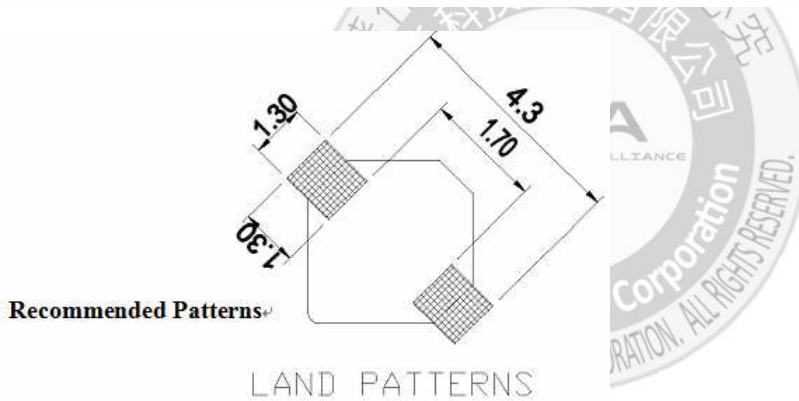
1. Inductor in DC/DC converter.
2. Use in STB、PDA、Notebook.

## Shape and Dimension



Unit : mm

	DIM.	TOL.
M1	3.20	MAX.
M2	3.20	MAX.
M3	1.55	MAX



## Ordering Information

WL	SS	214P	Z0	N	1R5	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	Shielded SMD Power Inductors	3 * 3 mm	Z0:STD	N: ± 30%	1R5 = 1.5uH 100 = 10.0uH	P=7" Reeled (Embossed tape)	B:STD

### Electrical Characteristics

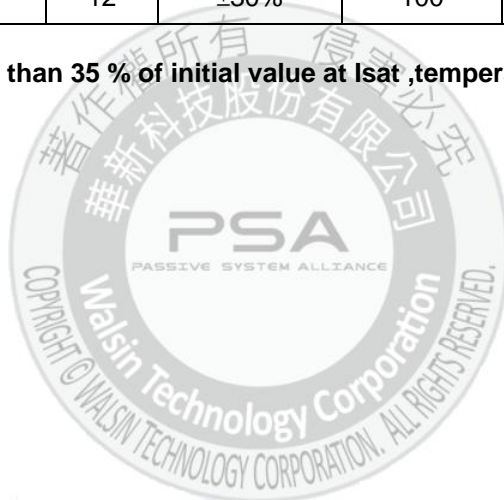
WLSS214P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (mA)	I sat (mA)
WLSS214PZ0N1R5PB	1R5	1.5	±30%	100	63	2000	1800
WLSS214PZ0N1R8PB	1R8	1.8	±30%	100	75	1800	1650
WLSS214PZ0N2R2PB	2R2	2.2	±30%	100	94	1600	1500
WLSS214PZ0N2R7PB	2R7	2.7	±30%	100	106	1400	1350
WLSS214PZ0N3R3PB	3R3	3.3	±30%	100	125	1240	1200
WLSS214PZ0N3R9PB	3R9	3.9	±30%	100	138	1120	1100
WLSS214PZ0N4R7PB	4R7	4.7	±30%	100	169	1000	1000
WLSS214PZ0N5R6PB	5R6	5.6	±30%	100	188	980	950
WLSS214PZ0N6R8PB	6R8	6.8	±30%	100	213	920	850
WLSS214PZ0N8R2PB	8R2	8.2	±30%	100	281	800	800
WLSS214PZ0N100PB	100	10	±30%	100	294	760	700
WLSS214PZ0N120PB	120	12	±30%	100	394	640	620

Tolerance : N: ±30%

※Inductance drops no more than 35 % of initial value at Isat ,temperature rises  $\Delta t < 40\text{ }^{\circ}\text{C}$  at

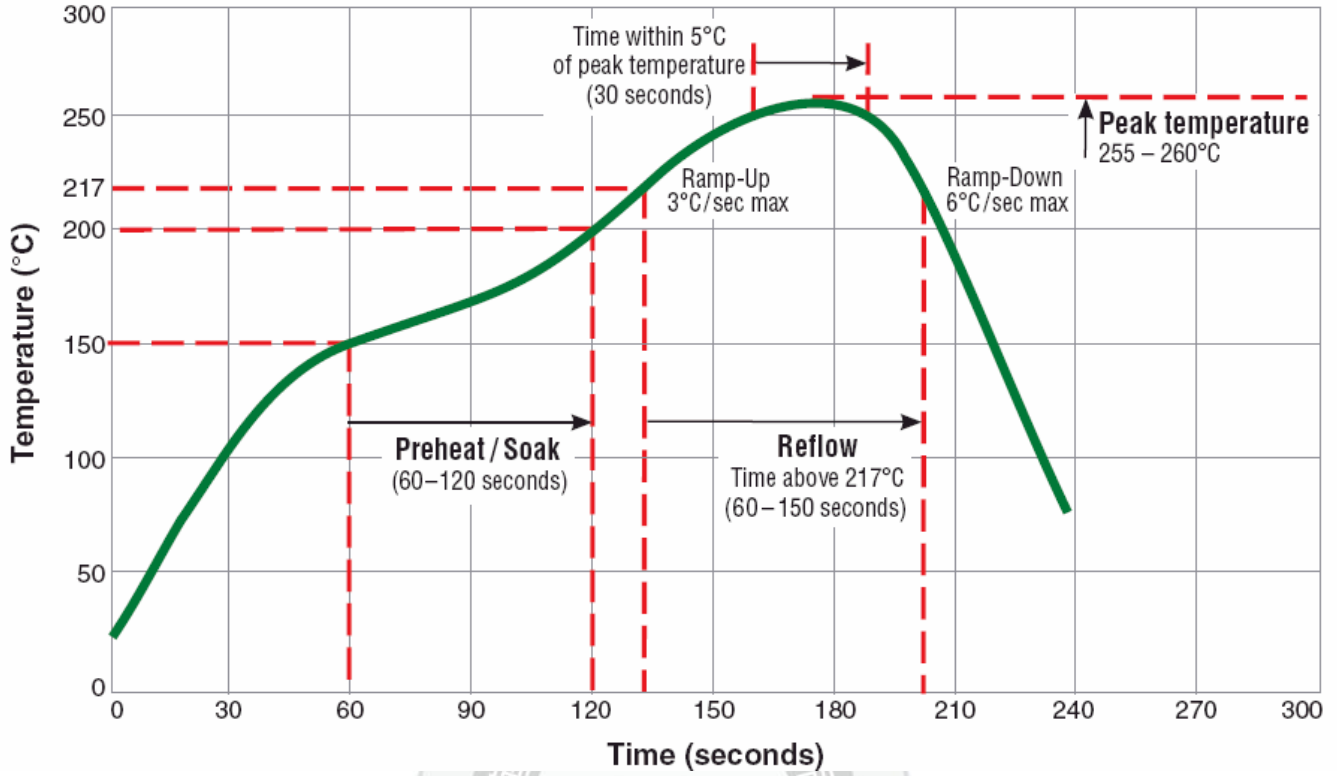
Rated Current.

※MSL : LEVEL 1



## TYPICAL RoHS REFLOW PROFILE

### Typical RoHS Reflow Profile



## RELIABILITY PERFORMANCE

### Reliability Experiment For Electrical

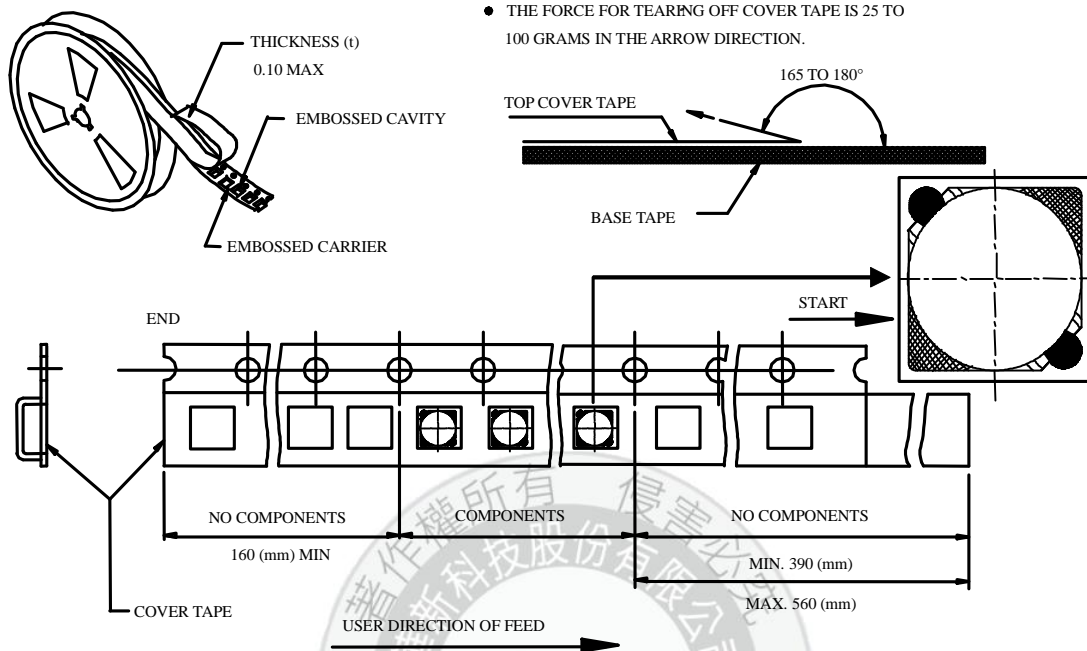
Test Item	Test Condition	Standard Source
Humidity Test	+40°C ± 2°C, humidity of 90% ± 5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1. Temperature: +125°C ± 2°C 2. Test time: 48 ± 2hrs	IEC 68-2 Test Condition B
Low Temperature Test	1. Temperature: -40°C ± 2°C 2.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

## PACKAGING SPECIFICATION FOR SMD COILS

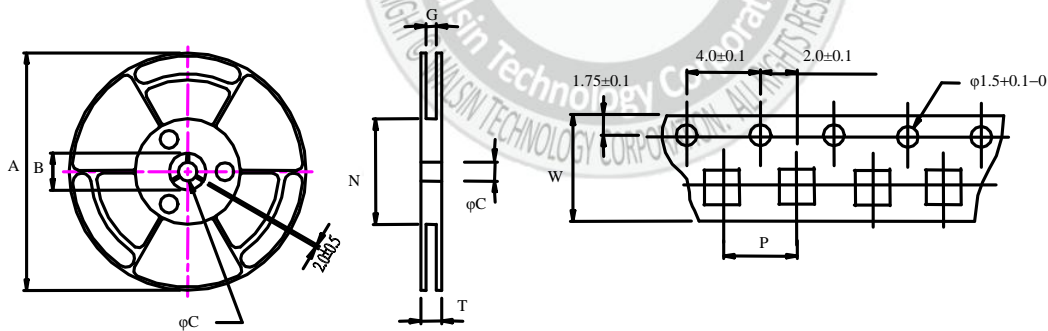


● THE FORCE FOR TEARING OFF COVER TAPE IS 25 TO 100 GRAMS IN THE ARROW DIRECTION.

#### ■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

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



Unit : mm

	A	B	C	G	N	P	T	W	t
DIM.	178	21	13.0	12.4	100	8.0	18.4	12.0	0.35
TOL.	MAX	±0.8	±0.5	+1.0-0.5	MIN	±0.1	MAX	+0.3 -0.1	±0.05

Quantity per reel : 1K pcs