

# APPROVAL SHEET

## WLSS745P Series Shielded SMD Power Inductor



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

## Features

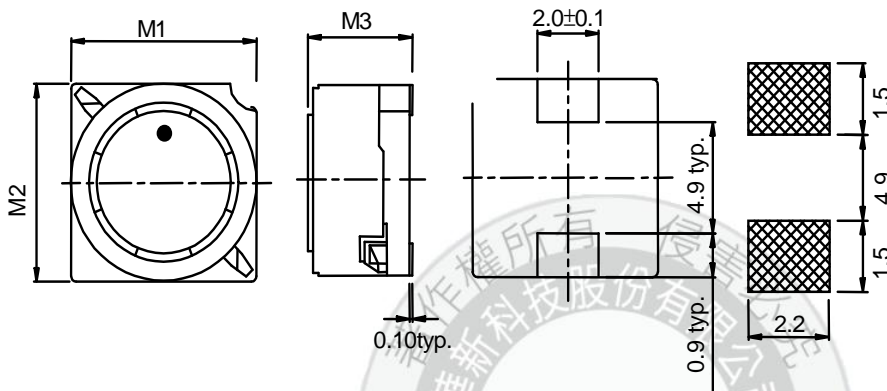
1. Shielded power inductor.
2. Wide inductance range.

## Applications

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

## Shape and Dimension

Unit : mm



	DIM.	TOL.
M1	7.0	±0.2
M2	7.0	±0.2
M3	4.5	±0.3

Recommended Patterns

Recommended Patterns

## Ordering Information

WL	SS	745P	Z0	M	1R2	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	7 * 7 *4.5mm	Z0:STD	M: ± 20%	1R2 = 1.2uH 100 = 10.0uH 101 =100uH	L=13" Reeled (Embossed tape)	B:STD

## Electrical Characteristics

WLSS428P Series	Marking	L (uH)	Test Freq(KHz)	DCR (Ω) MAX.	I sat (A)	Rated Current(A)
WLSS745PZ0M3R3LB	3R3	3.3	1	0.024	2.50	2.30
WLSS745PZ0M4R7LB	4R7	4.7	1	0.036	2.00	2.10
WLSS745PZ0M6R8LB	6R8	6.8	1	0.047	1.70	1.74
WLSS745PZ0M100LB	100	10	1	0.044	1.30	1.78
WLSS745PZ0M150LB	150	15	1	0.063	1.10	1.53
WLSS745PZ0M220LB	220	22	1	0.074	0.90	1.34
WLSS745PZ0M330LB	330	33	1	0.116	0.82	1.09
WLSS745PZ0M470LB	470	47	1	0.150	0.75	0.92
WLSS745PZ0M680LB	680	68	1	0.210	0.60	0.77
WLSS745PZ0M101LB	101	100	1	0.300	0.50	0.65
WLSS745PZ0M151LB	151	150	1	0.408	0.40	0.55
WLSS745PZ0M221LB	221	220	1	0.624	0.33	0.45
WLSS745PZ0M331LB	331	330	1	0.888	0.25	0.37
WLSS745PZ0M471LB	471	470	1	1.260	0.22	0.31
WLSS745PZ0M681LB	681	680	1	1.776	0.20	0.27
WLSS745PZ0M102LB	102	1000	1	2.736	0.14	0.25

Tolerance : M:±20%

※Inductance measured using the HP4284A or HP4285A LCR meter, CHROMA1320 & 3302 & 16502.

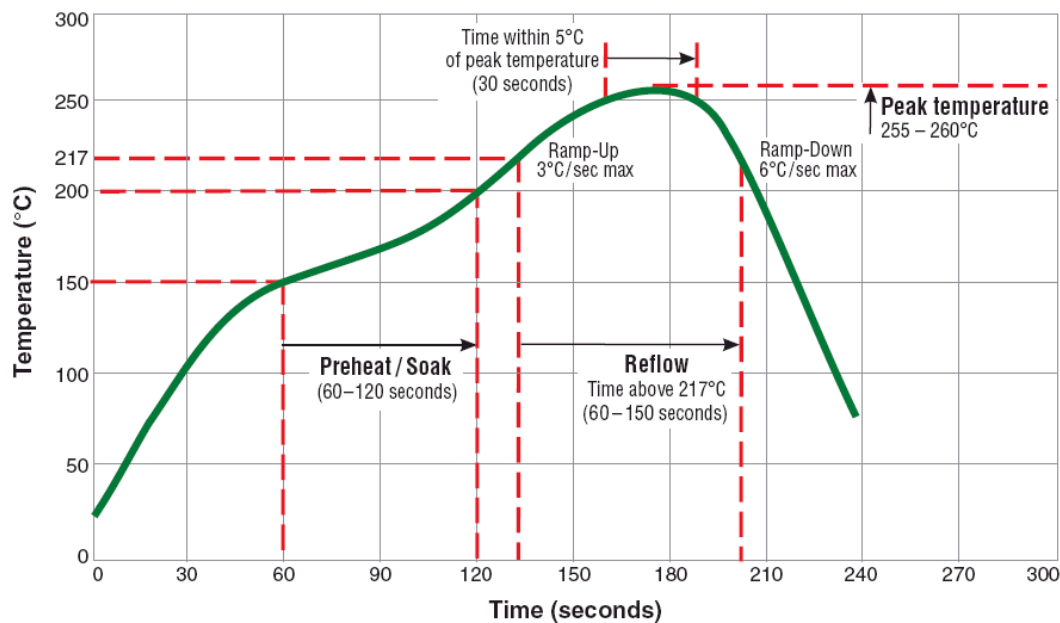
※Operating Temp: -25°C to +105°C.

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

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

※MSL : LEVEL 1

## Typical RoHS Reflow Profile

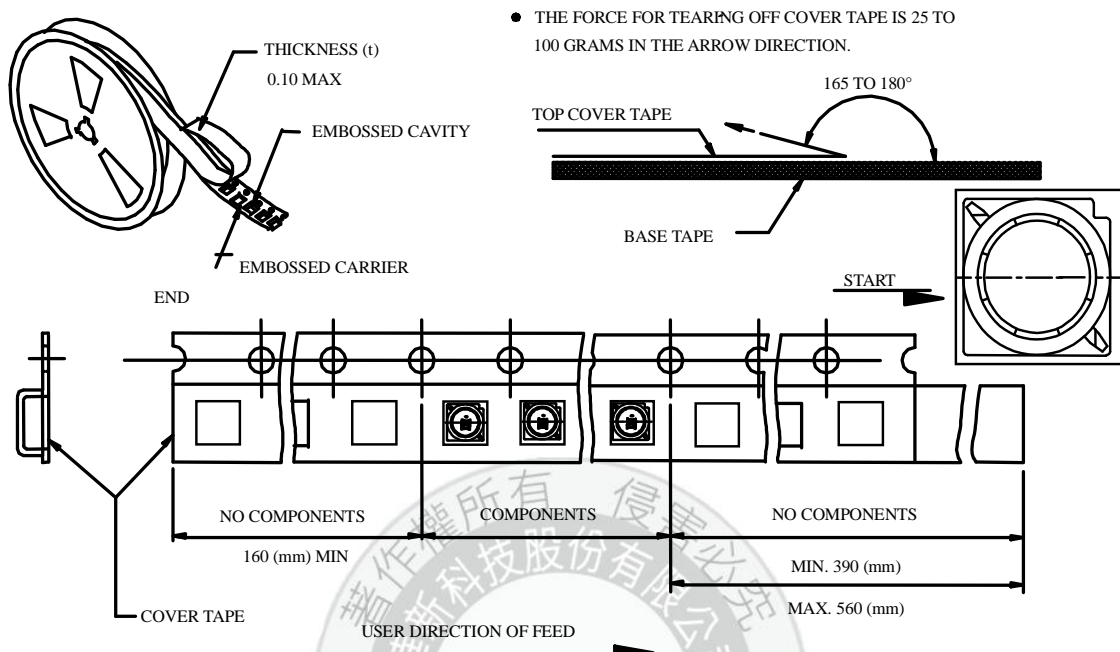


## RELIABILITY PERFORMANCE

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 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
Low Temperature Storage	1 Temperature: -40, -25, -10. 2. Test time: 2, 16, 72, 96 hours.	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	+100°C ± 2°C (1000Hour)	MIL-STD-202G Method 108A Test Condition D
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	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)
Terminal Pull Strength Test	1/2, 1, 2, 3, 5, 10 Pound, as products terminal feature.	MIL-STD-202G Method 211A Test Condition A
Solder Ability Test	Soak in 255 °C solder pot of 3Sec, PAD must have 95% above coverage.	J-STD-003B
Terminal Push Strength Test	No special requirements: 5N thrust to maintain 10 Sec.	JIS C5321:1997

**Tape & Reel Packaging Dimensions:**

**PACKAGING SPECIFICATION FOR SMD COILS**

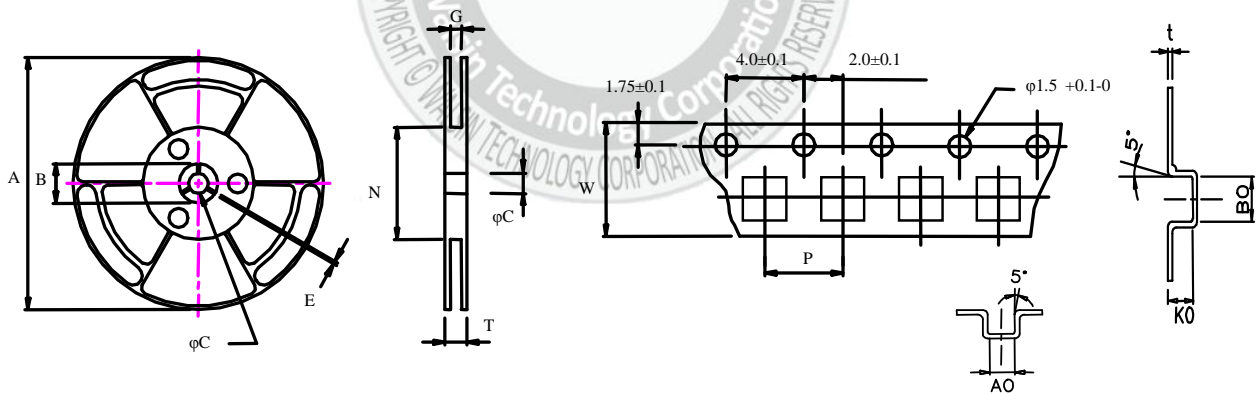


● THE FORCE FOR TEARING OFF COVER TAPE IS 25 TO 100 GRAMS IN THE ARROW DIRECTION.

■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

■ DIMENSIONS OF CARRIER TAPE (mm)



Unit : mm

	A	B	C	G	T	N	P	t	W
DIM.	340	21.0	13.0	16.4	22.4	60.0	12.0	0.35	16
TOL.	MAX	±0.8	±0.5	±0.2	MAX	MIN	±0.3	±0.5	±0.3

Quantity per reel : 1 K pcs