

# APPROVAL SHEET

## **WLSN075D Series Unshielded SMD Power Inductors**

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

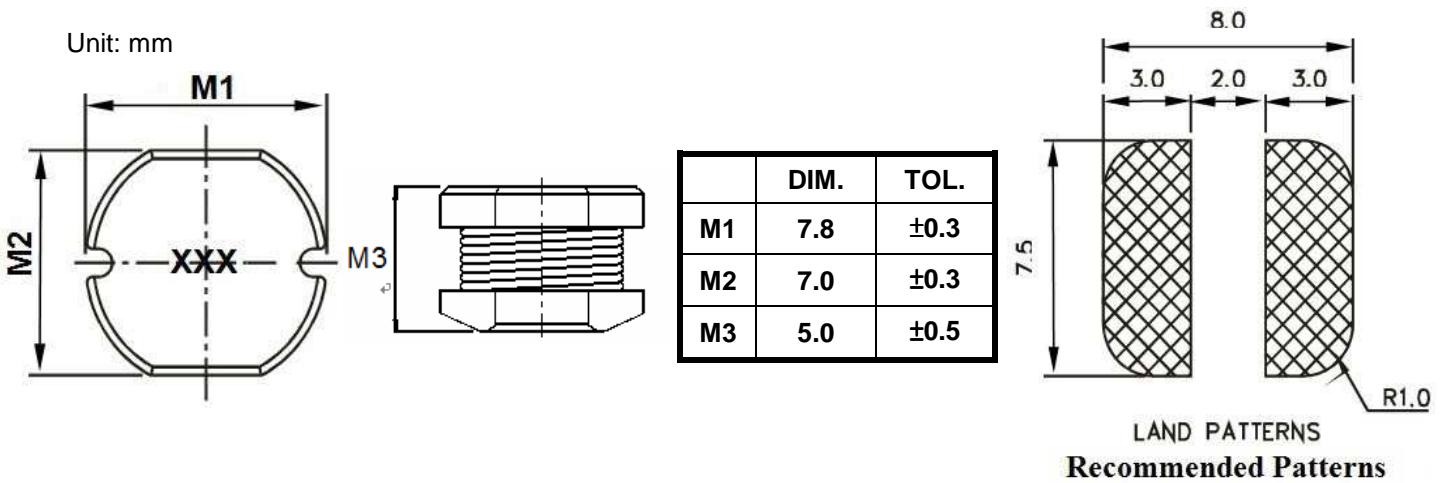
**Features**

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

**Applications**

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

**Shape and Dimension**



**Ordering Information**

WL	SN	075D	Z0	M	1R0	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	Unshielded SMD Power Inductors	7.8 * 7.0 mm	Z0:STD	K : ± 10%	6R8 = 6.8uH 100 = 10.0uH 101 = 100uH 302 = 3000uH	L=13" Reeled (Embossed tape)	B:STD

## Electrical Characteristics

WLSN075D Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR ( $\Omega$ ) MAX.	Rated Current (A)
WLSN075DZ0K6R8LB	6R8	6.8	$\pm 10\%$	100	0.058	3.0
WLSN075DZ0K8R2LB	8R2	8.2	$\pm 10\%$	100	0.06	2.4
WLSN075DZ0K100LB	100	10	$\pm 10\%$	100	0.07	2.30
WLSN075DZ0K120LB	120	12	$\pm 10\%$	100	0.08	2.00
WLSN075DZ0K150LB	150	15	$\pm 10\%$	100	0.09	1.80
WLSN075DZ0K180LB	180	18	$\pm 10\%$	100	0.10	1.60
WLSN075DZ0K220LB	220	22	$\pm 10\%$	100	0.11	1.50
WLSN075DZ0K270LB	270	27	$\pm 10\%$	100	0.12	1.30
WLSN075DZ0K330LB	330	33	$\pm 10\%$	100	0.13	1.20
WLSN075DZ0K390LB	390	39	$\pm 10\%$	100	0.16	1.10
WLSN075DZ0K470LB	470	47	$\pm 10\%$	100	0.18	1.10
WLSN075DZ0K560LB	560	56	$\pm 10\%$	100	0.24	0.94
WLSN075DZ0K680LB	680	68	$\pm 10\%$	100	0.28	0.85
WLSN075DZ0K820LB	820	82	$\pm 10\%$	100	0.37	0.78
WLSN075DZ0K101LB	101	100	$\pm 10\%$	10	0.43	0.72
WLSN075DZ0K121LB	121	120	$\pm 10\%$	10	0.47	0.66
WLSN075DZ0K151LB	151	150	$\pm 10\%$	10	0.64	0.58
WLSN075DZ0K181LB	181	180	$\pm 10\%$	10	0.71	0.51
WLSN075DZ0K221LB	221	220	$\pm 10\%$	10	0.96	0.49
WLSN075DZ0K271LB	271	270	$\pm 10\%$	10	1.11	0.42
WLSN075DZ0K331LB	331	330	$\pm 10\%$	10	1.26	0.40
WLSN075DZ0K391LB	391	390	$\pm 10\%$	10	1.77	0.36
WLSN075DZ0K471LB	471	470	$\pm 10\%$	10	1.96	0.34
WLSN075DZ0K202LB	222	2200	$\pm 10\%$	100	7.2	0.15
WLSN075DZ0K302LB	302	3000	$\pm 10\%$	1	10.0	0.12
WLSN075DZ0K472LB	472	4700	$\pm 10\%$	1	21.0	0.08

Tolerance : K :  $\pm 10\%$

TEST INSTRUMENT: HP4284A & Chroma3302, 1320, 16052.

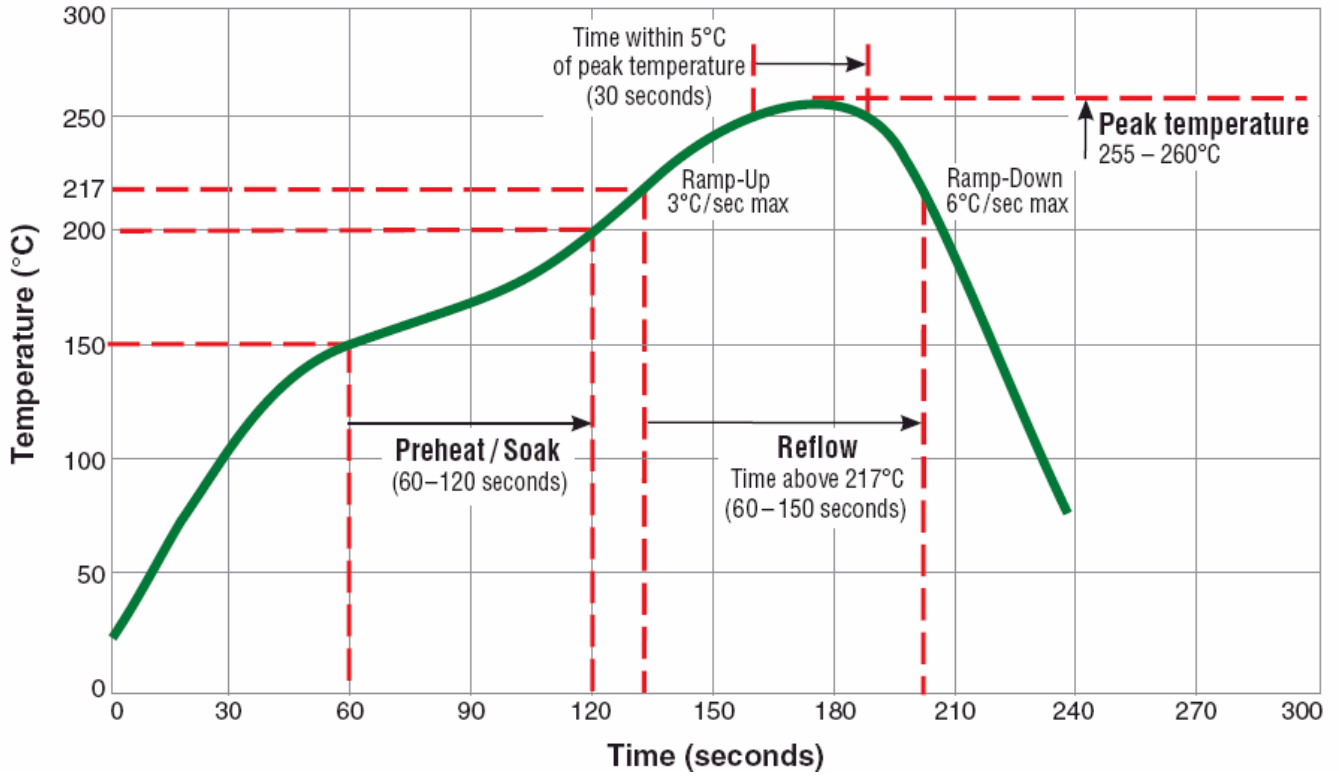
\* Operating Temp :  $-25^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .

\* Inductance drops no more than 10% at rated current applied or temperature rises  $\Delta t \leq 40^{\circ}\text{C}$

\* MSL : LEVEL 1

### TYPICAL RoHS REFLOW PROFILE

#### Typical RoHS Reflow Profile

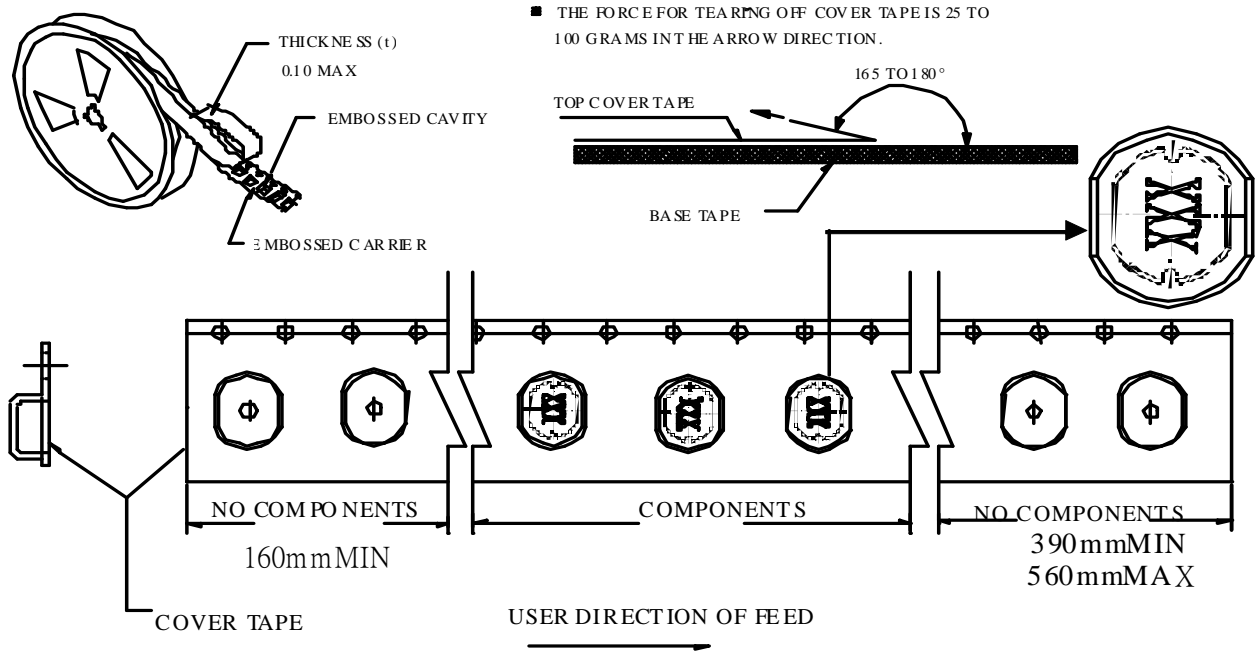


**Mechanical Performance /Environmental Test Performance Specifications:**

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:**

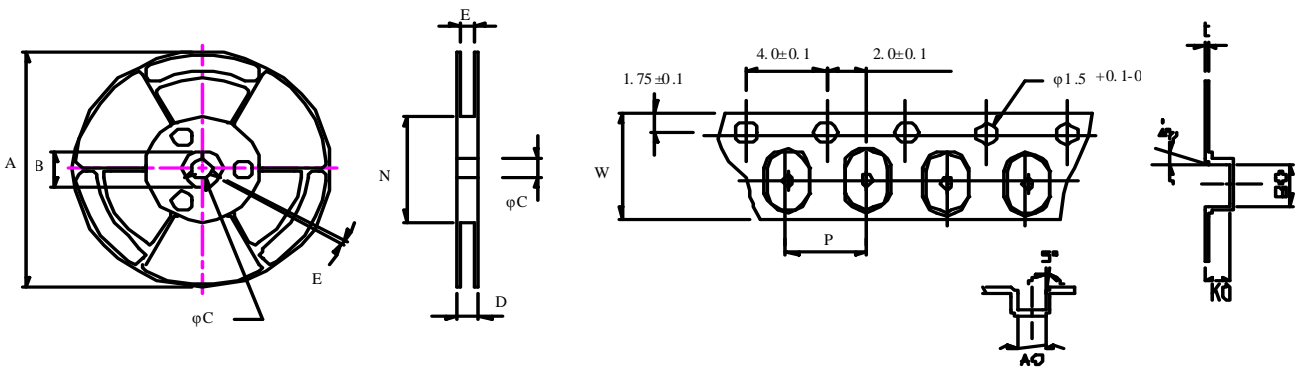
**PACKAGING SPECIFICATION FOR SMD COILS**



■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

■ DIMENSIONS OF CARRIER TAPE (mm)



UNIT : mm

	A	B	C	E	N	P	D	W	t	AO	BO	KO
DIM.	340	21.0	13	16.4	80	12.0	22.4	16.0	0.30	7.2	8.1	5.5
TOL.	MAX	±0.8	±0.5	±2.0	MIN.	±0.10	MAX.	±0.3	±0.05	±0.10	±0.10	±0.10

Quantity per reel : 1K pcs