

# APPROVAL SHEET

## **WLSN073D Series SMD Unshielded Power Inductors**

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

**Features**

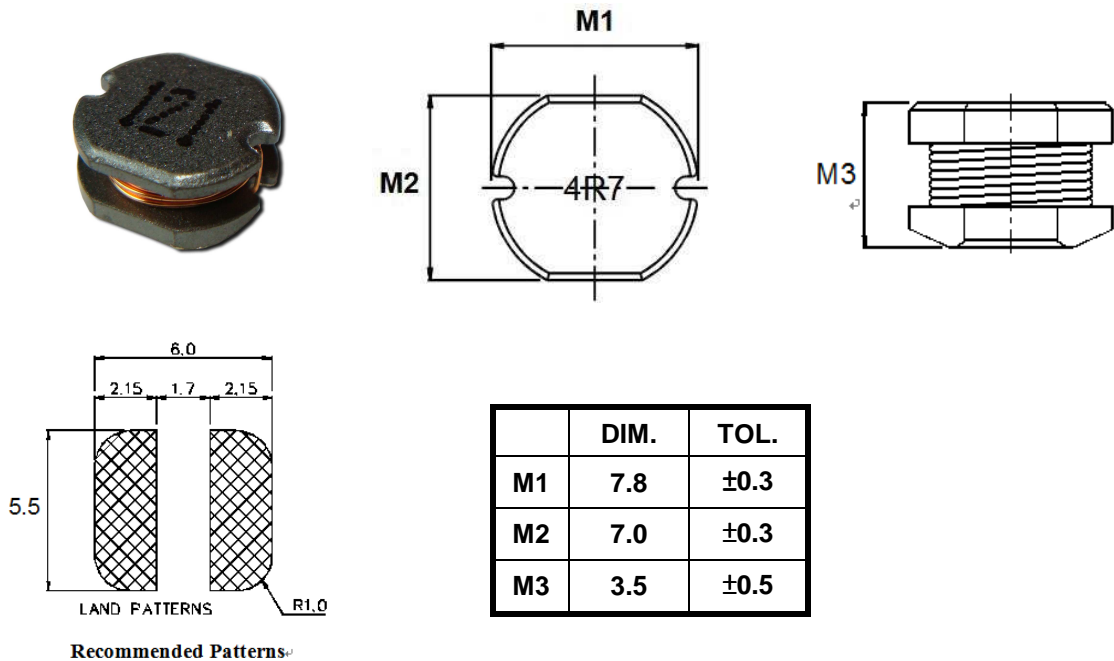
- 1. Unshielded power inductor.
- 2. Wide inductance range.

**Applications**

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

**Shape and Dimension**

Unit: mm



**Ordering Information**

WL	SN	073D	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	SMD Unshielded Power Inductors	7.8 * 7.0 mm	Z0:STD	M: ± 20% K : ± 10%	100 = 10.0uH 101 = 100uH	L=13" Reeled (Embossed tape)	B:STD

## Electrical Characteristics

WLSN073D Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR ( $\Omega$ ) MAX.	Rated Current (A)
WLSN073DZ0M100LB	100	10	$\pm 20\%$	100	0.0803	1.44
WLSN073DZ0M120LB	120	12	$\pm 20\%$	100	0.0897	1.39
WLSN073DZ0M150LB	150	15	$\pm 20\%$	100	0.104	1.24
WLSN073DZ0M180LB	180	18	$\pm 20\%$	100	0.111	1.12
WLSN073DZ0M220LB	220	22	$\pm 20\%$	100	0.129	1.07
WLSN073DZ0M270LB	270	27	$\pm 20\%$	100	0.153	0.94
WLSN073DZ0M330LB	330	33	$\pm 20\%$	100	0.170	0.85
WLSN073DZ0M390LB	390	39	$\pm 20\%$	100	0.217	0.74
WLSN073DZ0M470LB	470	47	$\pm 20\%$	100	0.252	0.68
WLSN073DZ0K560LB	560	56	$\pm 10\%$	100	0.282	0.64
WLSN073DZ0K680LB	680	68	$\pm 10\%$	100	0.332	0.59
WLSN073DZ0K820LB	820	82	$\pm 10\%$	100	0.406	0.54
WLSN073DZ0K101LB	101	100	$\pm 10\%$	10	0.481	0.51
WLSN073DZ0K121LB	121	120	$\pm 10\%$	10	0.536	0.49
WLSN073DZ0K151LB	151	150	$\pm 10\%$	10	0.755	0.40
WLSN073DZ0K181LB	181	180	$\pm 10\%$	10	1.022	0.36
WLSN073DZ0K221LB	221	220	$\pm 10\%$	10	1.200	0.31
WLSN073DZ0K271LB	271	270	$\pm 10\%$	10	1.306	0.29
WLSN073DZ0K331LB	331	330	$\pm 10\%$	10	1.495	0.28

**TOLERANCE : M: $\pm 20\%$ , L: $\pm 15\%$ , K: $\pm 10\%$**

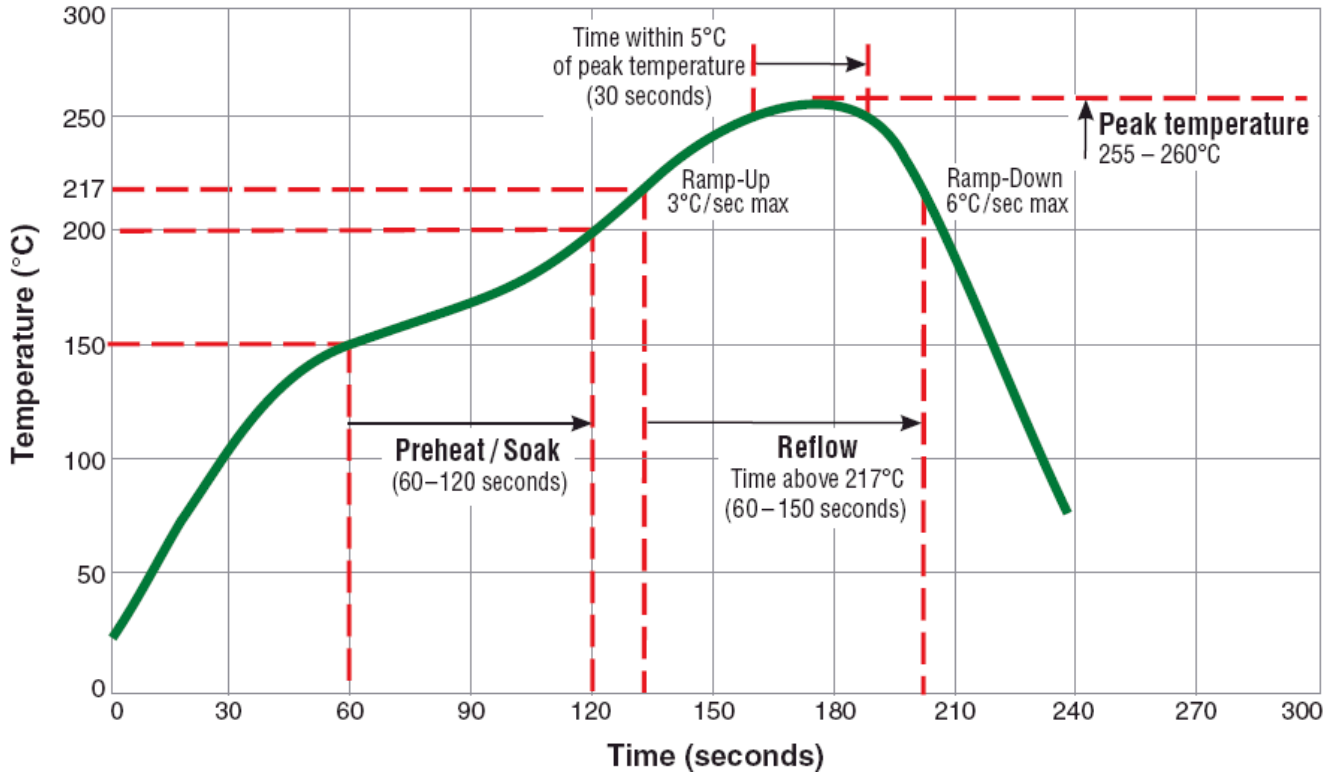
**TEST INSTRUMENT: HP4285A/ Chroma 3302,1320.16502**

**\* \* Inductance drops no more than 20% at rated current applied or temperature rises  $\Delta t \leq 40^\circ\text{C}$**

**\* MSL:LEVEL 1**

**TYPICAL RoHS REFLOW PROFILE**

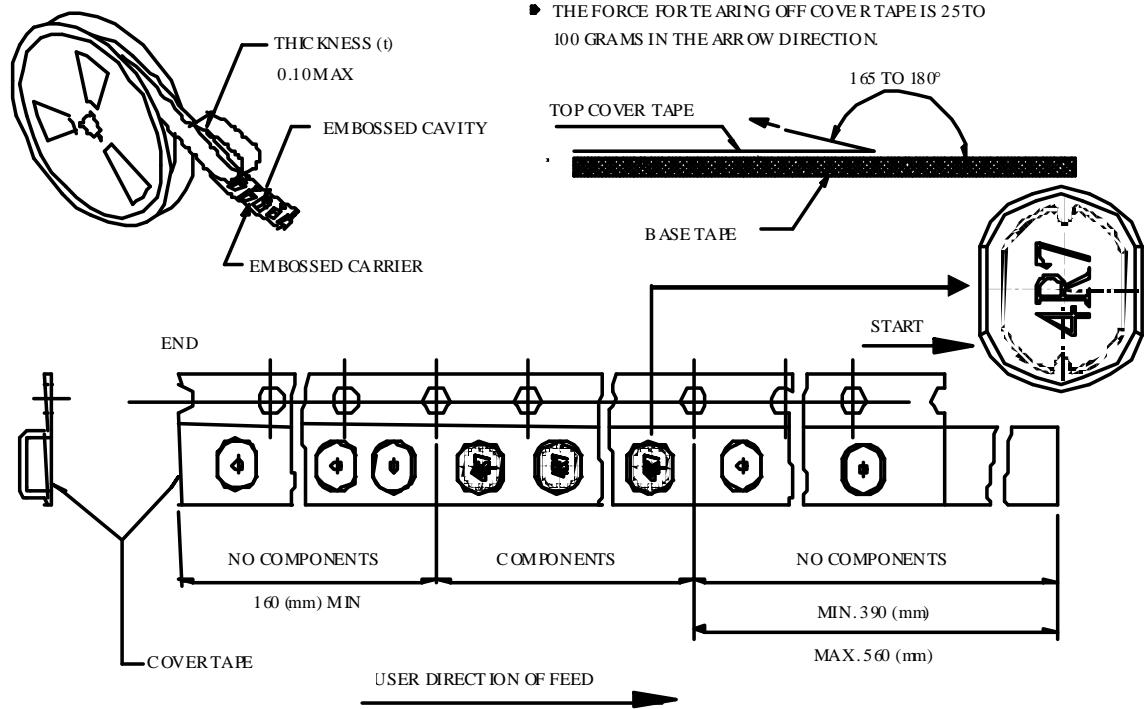
**Typical RoHS Reflow Profile**



**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

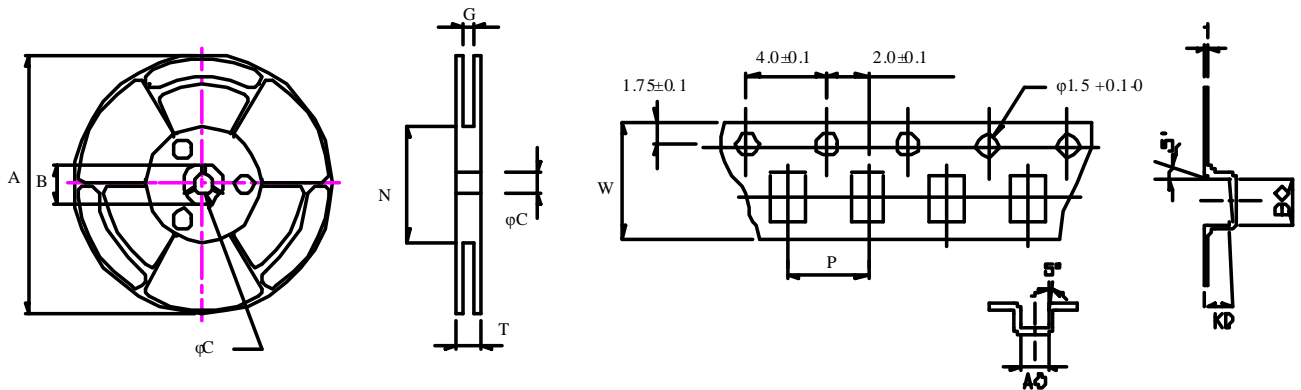
**Tape & Reel Packaging Dimensions:**



■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC

■ DIMENSIONS OF CARRIER TAPE (mm)



	A	B	C	G	N	P	T	W	t	AO	BO	KO
DIM.	340	21.0	13	16.4	100	12.0	22.4	16.0	0.35	7.3	8.0	4.3
TOL.	MAX	±0.8	±0.5	±0.2	MIN.	±0.10	MAX.	±0.3	±0.05	±0.10	±0.10	±0.10

Quantity per reel : 1K pcs