

# APPROVAL SHEET

# WLSN032D Series SMD Unshielded Power Inductors

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



#### **Features**

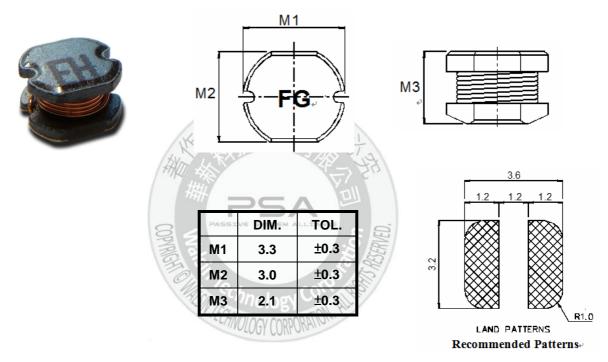
- 1. Unshielded power inductor.
- 2. Wide inductance range.

### **Applications**

- 1. Inductor in DC/DC converter.
- 2. Use in STB Notebook Radio LCDs other electrical devices.

#### **Shape and Dimension**

Unit: mm



### **Ordering Information**

WL	SN	032D	Z0	М	1R0	Р	В
Product Code	Series	Dimensions	Series extension	Tolerance	Value	Packing Code	
WL: Inductor	SMD Unshielded Power Inductors	3.3 * 3.0 mm	Z0:STD	M: ± 20%	1R0 = 1.0uH 100 = 10.0uH	P=7" Reeled (Embossed tape)	B:STD



#### **Electrical Characteristics**

WLSN032D Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN032DZ0M1R0PB	BA	1.0	± 20%	100	0.07	2.080
WLSN032DZ0M1R4PB	ВС	1.4	± 20%	100	0.09	1.860
WLSN032DZ0M1R8PB	BE	1.8	± 20%	100	0.11	1.800
WLSN032DZ0M2R2PB	СС	2.2	± 20%	100	0.13	1.390
WLSN032DZ0M2R7PB	СН	2.7	± 20%	100	0.14	1.320
WLSN032DZ0M3R3PB	DD	3.3	± 20%	100	0.20	1.250
WLSN032DZ0M3R9PB	DJ	3.9	± 20%	100	0.21	1.200
WLSN032DZ0M4R7PB	EH	4.7	± 20%	100	0.33	1.030
WLSN032DZ0M5R6PB	FG	5.6	± 20%	100	0.35	0.910
WLSN032DZ0M6R8PB	GI	6.8	± 20%	100	0.38	0.850
WLSN032DZ0M8R2PB	IC	8.2	有±20%	100	0.43	0.820
WLSN032DZ0M100PB	KA	10	± 20%	100	0.50	0.740
WLSN032DZ0M120PB	QA	12	± 20%	100	0.65	0.640
WLSN032DZ0M150PB	MA	//15	± 20%	100	0.82	0.600
WLSN032DZ0M180PB	RA	18	± 20%	100	0.90	0.540
WLSN032DZ0M220PB	LA S	22	± 20%	5 100	1.14	0.500
WLSN032DZ0M270PB	SA	27	± 20%	100	1.39	0.430
WLSN032DZ0M330PB	NA	33 %	± 20%	100	1.55	0.400
WLSN032DZ0M390PB	PA	39/7/	± 20%	100	2.15	0.370
WLSN032DZ0M470PB	OA	47	± 20%	100	2.44	0.360
WLSN032DZ0M560PB	UA	56	± 20%	100	2.68	0.310
WLSN032DZ0M680PB	VA	68	± 20%	100	3.05	0.300
WLSN032DZ0M820PB	XA	82	± 20%	100	3.48	0.280
WLSN032DZ0M221PB	LB	220	± 20%	100	6.30	0.200
WLSN032DZ0M471PB	ОВ	470	± 20%	100	14.00	0.090

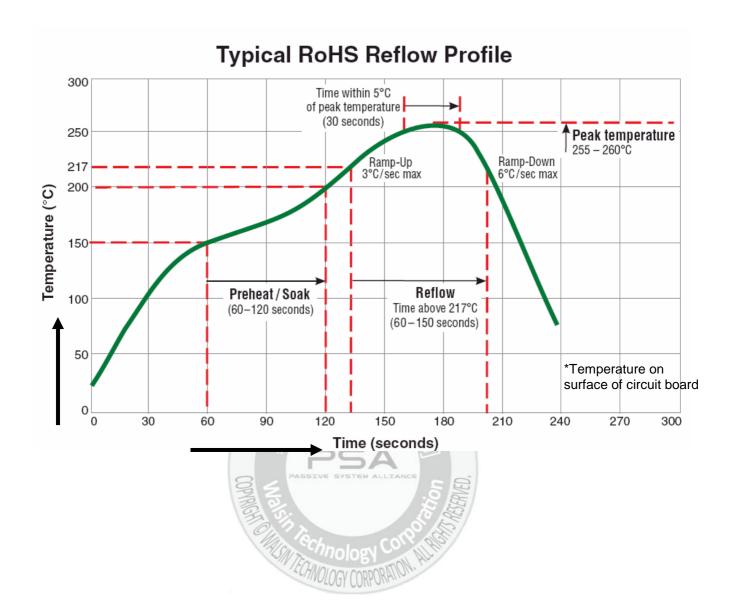
TEST INSTRUMENT: <u>HP4284A · CHROMA 3302/1320/16502</u>

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

\*MSL: LEVEL 1



#### **TYPICAL RoHS REFLOW PROFILE**





#### **RELIABILITY PERFORMANCE**

Reliability Experiment For Electrical

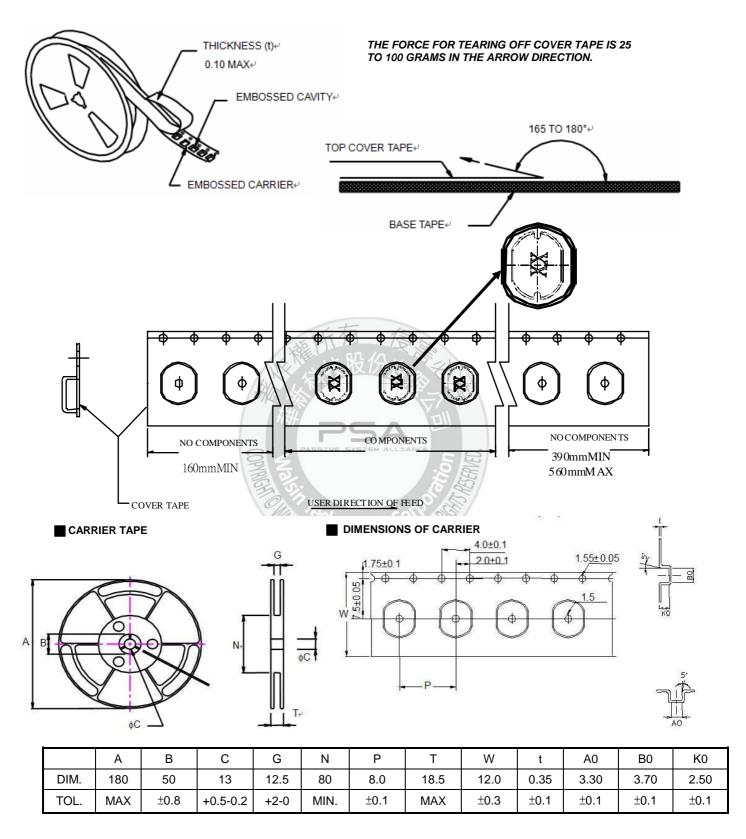
Test Item	Test Condition	Standard Source	
Humidity Test	+40 $^{\circ}$ ± 2 $^{\circ}$ , humidity of 90% ± 5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B	
High Temperature Test	1.Temperature: +125°C±2°C 2.Test time: 48±2hrs	IEC 68-2 Test Condition B	
Low Temperature Test	1.Temperature: -40°C±2°C 2.Test time: 48±2hrs	IEC 68-2 Test Condition A	
Thermal Shock	+125 $^{\circ}$ C±5 $^{\circ}$ C (30 minutes) ~ -40 ± 5 $^{\circ}$ C (30 minutes), temperature switch time: 5 minutes (total 50 cycles).	MIL-STD-202G Method 107G Test Condition B- 2	
Life Test	+70℃±5℃ (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℃ for 5Sec in air, Through 2 Cycle. Temperature Ramp:+1~4℃/sec; Above1 83℃, must keep 90 s - 120 s	MIL-STD-202G Method 210F Test Condition (Reflow)
Solder Ability Test	Soak in 245 $^{\circ}\!$	J-STD-003B



#### **Tape & Reel Packaging Dimensions:**



Quantity per reel: 0.5K pcs

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Walsin:

WLSN032DZ0M1R4PI	B WLSN032DZ0M2R7P	B WLSN032DZ0M100P	B WLSN032DZ0M120PB
WLSN032DZ0M270PB	WLSN032DZ0M471PB	WLSN032DZ0M820PB	WLSN032DZ0M390PB
WLSN032DZ0M680PB	WLSN032DZ0M220PB	WLSN032DZ0M3R3PB	WLSN032DZ0M3R9PB
WLSN032DZ0M470PB	WLSN032DZ0M8R2PB	WLSN032DZ0M150PB	WLSN032DZ0M180PB
WLSN032DZ0M2R2PB	WLSN032DZ0M560PB	WLSN032DZ0M5R6PB	WLSN032DZ0M1R0PB
WLSN032DZ0M330PB	WLSN032DZ0M6R8PB	WLSN032DZ0M221PB	WLSN032DZ0M4R7PB
WLSN032DZ0M1R8PB			