APPROVAL SHEET

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WLBD0603HC
Chip Bead SERIES

RoHS COMPLIANT

Pb Pb-Free

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

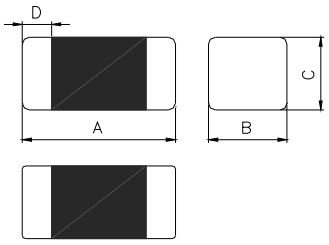
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FEATURES

1. Combination of high frequency noise suppression with capability of handing high current.
2. Low DC Resistance.

SHAPE and DIMENSION





Chip Size	
A	0.60±0.03
B	0.30±0.03
C	0.30±0.03
D	0.1~0.2

Units: mm

Ordering Information

WL	BD	0603	HC	U	300	T	H
Product Code WL: Inductor	**Series** BD: Chip Bead.	**Dimensions** 0.6 * 0.3 mm 0603 :EIA 0201	**Series extension** Refer to characteristic	**Tolerance** U: ±25%	**Value** 300 =30 OHM 301 =300 OHM 102 =1000OHM	**Packing Code** T = 7" Paper Tape	H = high current

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PART NUMBER AND CHARACTERISTICS TABLE

WLBD0603HC series

Walsin Part Number	Impedance (Ω) +/-25%	Test Freq. (MHz)	DCR(Ω) (Max.)	Rated Current (mA)
WLBD0603HCU100TH	10	100	0.050	1000
WLBD0603HCU220TH	22	100	0.065	1000
WLBD0603HCU330TH	33	100	0.090	750
WLBD0603HCU470TH	47	100	0.120	500
WLBD0603HCU800TH	80	100	0.180	500
WLBD0603HCU121TH	120	100	0.230	450
WLBD0603HCU241TH	240	100	0.400	350
WLBD0603HCU331TH	330	100	0.500	300
	•Test Level：250 mV			
Test Instruments：	•HP4991A RF Impedance / Material Analyzer •HP4338A/B Milliohm meter •Agilent 5071C S-Parameter Network Analyzer •HP6632B System DC Power Supply			

GENERAL TECHNICAL DATA

Operating temperature range：- 40℃ ~ +85℃
Storage Condition：Less than 40℃ and 70% RH
Storage Time：6 months

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RELIABILITY AND TEST CONDITION

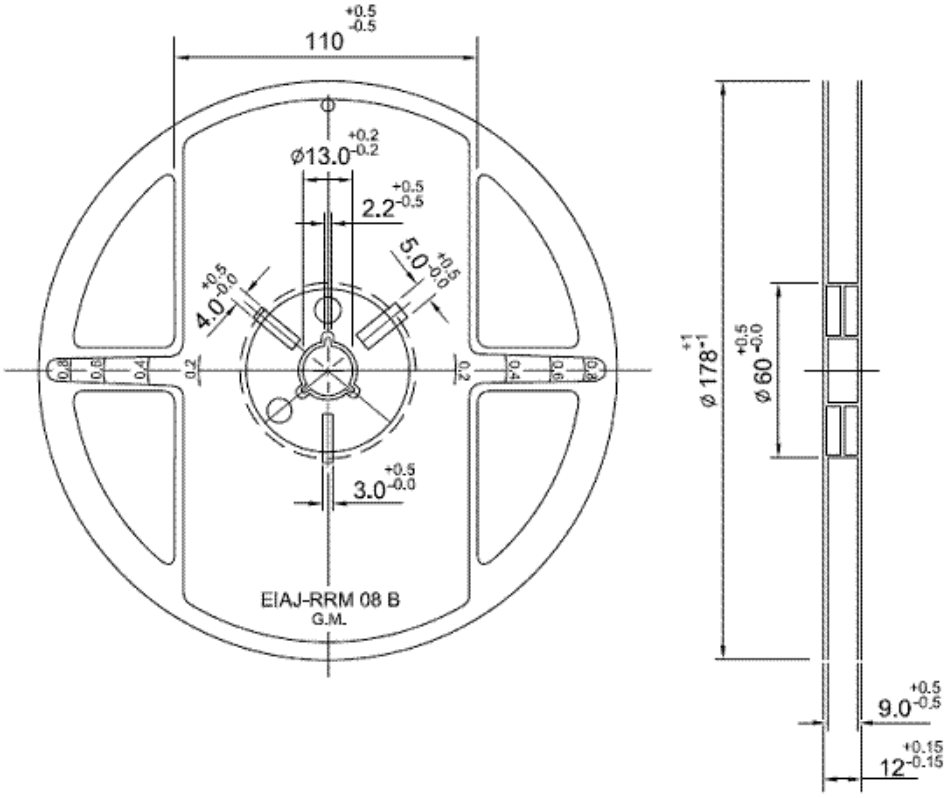
Test item	Test condition	Criteria
Temperature Cycle	1. Temperature:-40 ~ 85℃ For 30 minutes each 2. Cycle: 100 cycles 3. Measurement: at ambient temperature 24 hours after test completion	1. No mechanical damage 2. Impedance should be within ±30% of the initial value
Operational Life	1. Temperature: 85 ± 5℃ 2. Testing time: 1000 hours 3. Applied current: Full rated current 4. Measurement: At ambient temperature 24 hours after test completion	1. No mechanical damage 2. Impedance should be within ±30% of the initial value
Biased Humidity	1. Temperature: 40℃ ± 2℃ 2. Humidity: 90-95 % RH 3. Testing time: 1000 hrs 4. Measurement: at ambient temperature 24 hours after test completion	1. No mechanical damage 2. Impedance should be within ±30% of the initial value
Solderability	1. Solder temperature : 235 ± 5℃ 2. Flux : Rosin 3. DIP time : 5 ± 1 sec	1. More than 95 % of terminal electrode should be covered with new solder 2. No mechanical damage
Resistance to Solder Heat	1. Solder temperature : 260 ± 5℃ 2. Flux : Rosin 3. DIP time : 10 ± 1 sec	1. More than 95 % of terminal electrode should be covered with new solder 2. No mechanical damage 3. Impedance should be within ±30 % of the initial value
Adhesive Test	1. Reflow temperature : 245℃ It shall be soldered on the substrate applying direction parallel to the substrate 2. Apply force(F) : 2N Test time : 10 sec	1. No mechanical damage 2. Soldering the products on PCB after the pulling test force > 2 N
Rated Current	At ambient temperature & humidity Testing time:5 minutes (under full rated current)	Product surface temp： below room temperature plus 40℃

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Chip Size						Land Patterns For Reflow Soldering		
	Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)
WLBD	0603	0.6±0.03	0.30±0.03	0.30±0.03	0.15±0.05	**0.35**	**0.30**	**0.40**

Packaging Specification

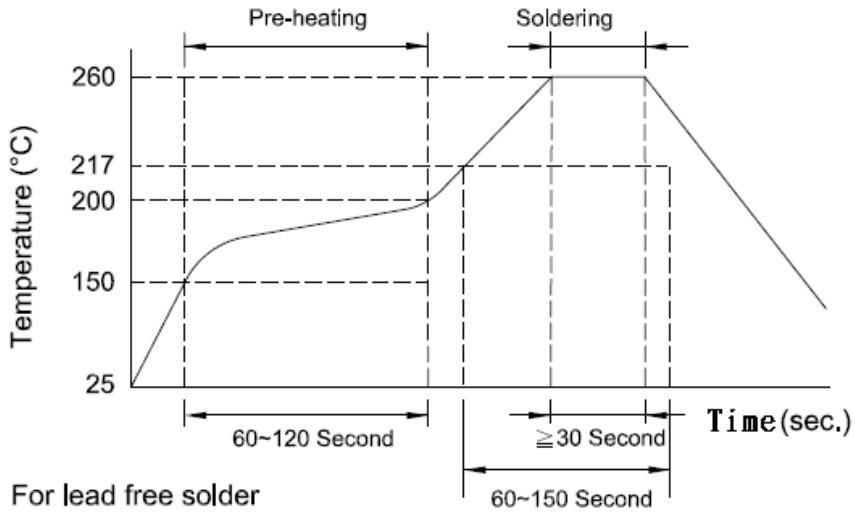
Reel Dimensions



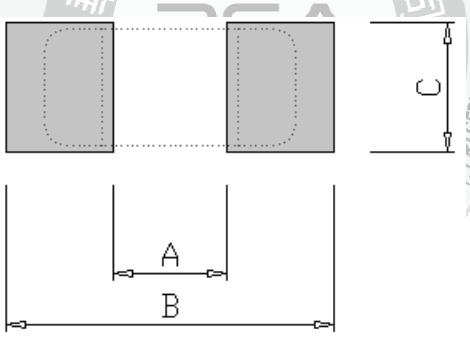
7" Reel Packaging Quantity	
Part Size (EIA Size)	**0603 (0201)**
Qty.(pcs)	15,000
BOX	5 reels / inner box

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Recommended Soldering Conditions



Land Patterns for Reflow Soldering



Solder Land Information

Size(mm)	A	B	C
0603 (EIA 0201)	0.20 ～ 0.30	0.80 ～ 0.90	0.20 ～ 0.30
	(0.008 ～ 0.012)	(0.031 ～ 0.035)	(0.008 ～ 0.012)

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