APPROVAL SHEET

WLFM_C
Multi-Layer Power Inductor

RoHS COMPLIANT
Pb-Free

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

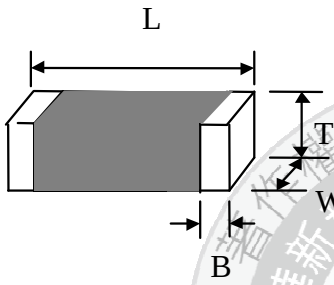
Features

1. General purpose chip ferrite power inductor for high integration electronics device.
2. Ceramic structure provides high reliability、high productivity.
3. Low DC resistance with high current.
4. RoHS compliance.

Applications

1. DC line filter, DC/DC inductor.
2. Suitable for DVD,DSC,PND,PC,NB,Power Line.

Shape and Dimension



Unit: mm (inches)

WLFM Series	L	W	T	B (Min/Max)
WLFM201209	2.00±0.20	1.25±0.20	0.90±0.10	0.50±0.30
WLFM201609	2.00±0.20	1.60±0.20	0.90±0.10	0.50±0.30
WLFM252009	2.50±0.20	2.00±0.20	0.90±0.10	0.50±0.30

Ordering Information

WL	FM	2012	09	M	R47	P	C
Product Code WL: Inductor	**Series** Multilayer	**Dimensions** 2012:EIA 0805 2016:EIA 0806 2520:EIA 1008	**Thickness** 09= 0.9mm	**Tolerance** M: ± 20%	**Value** R47=0.47uH 2R2=2.2uH	**Packing Code** P=7" Reeled (Embossed tape)	**C** General

Electrical Characteristics

WLFM_C Series

Walsin Part Number	L(uH) Inductance	Tolerance	Test Freq (MHz)	RDC DC Resistance (Ω) Max.	Rated Current (mA)	SRF (MHz)
WLFM201209M1R0PC	1.00	±20%	1	0.10	1100	90
WLFM201209M2R2PC	2.20	±20%	1	0.17	900	70
WLFM201209M3R3PC	3.30	±20%	1	0.20	800	50
WLFM201209M4R7PC	4.70	±20%	1	0.23	800	40
Walsin Part Number	**L(uH) Inductance**	**Tolerance**	**Test Freq (MHz)**	**RDC DC Resistance (Ω) Max.**	**Rated Current (mA)**	**SRF (MHz)**
WLFM201609M2R2PC	2.20	±20%	1	0.12	1100	40
WLFM201609M4R7PC	4.70	±20%	1	0.16	900	20
Walsin Part Number	**L(uH) Inductance**	**Tolerance**	**Test Freq (MHz)**	**RDC DC Resistance (Ω) Max.**	**Rated Current (mA)**	**SRF (MHz)**
WLFM252009MR47PC	0.47	±20%	1	0.04	1800	100
WLFM252009M1R0PC	1.00	±20%	1	0.055	1600	60
WLFM252009M1R5PC	1.50	±20%	1	0.07	1500	50
WLFM252009M2R2PC	2.20	±20%	1	0.08	1300	40
WLFM252009M3R3PC	3.30	±20%	1	0.10	1200	30
WLFM252009M4R7PC	4.70	±20%	1	0.11	1100	25
WLFM252009M6R8PC	6.80	±20%	1	0.20	1100	25

*1 : For special part number which is not shown in the above table, please refer to appendix.

*2 : **Apply DC 0.4 ~ 0.6A to chip for 1 ~ 3 sec. before to measure inductance.**

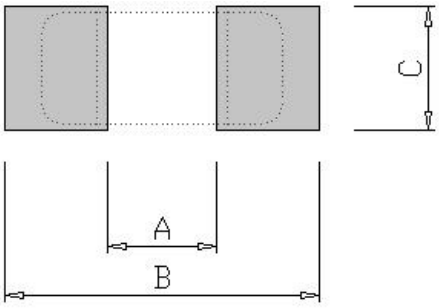
Test Instrument :

- HP4291B-RF Impedance / Material Analyzer
- HP4338A/B Milliohm meter
- Test Frequency : 1MHz / OSC Level : 100mV

General Technical Data

Operating temperature range : - 40℃ ~ +85℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time : 12 months Max.
Soldering method : Reflow

Land Patterns for Reflow Soldering



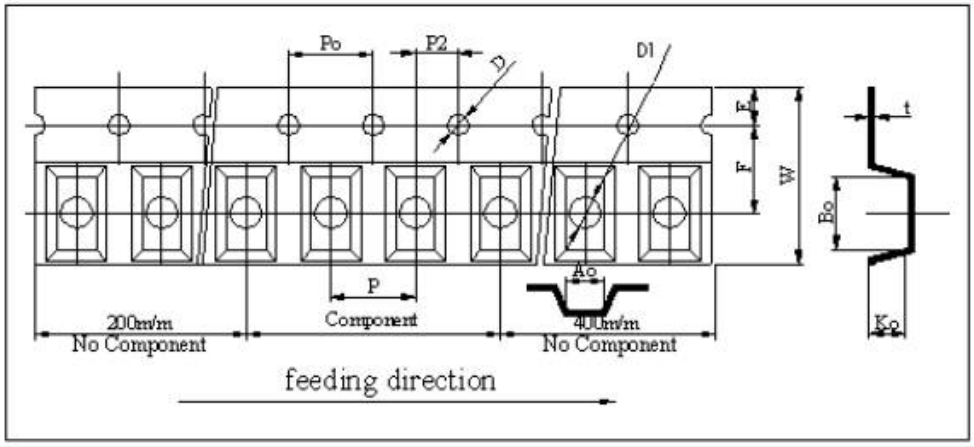
Size(mm)	A	B	C
2012	1.0 ~ 1.2	3.0 ~ 4.0	0.8 ~ 1.1
2016	1.0 ~ 1.2	3.0 ~ 4.0	1.0 ~ 1.5
2520	1.2~1.5	3.5~4.0	1.5~2.0

Reliability and Test Conditions

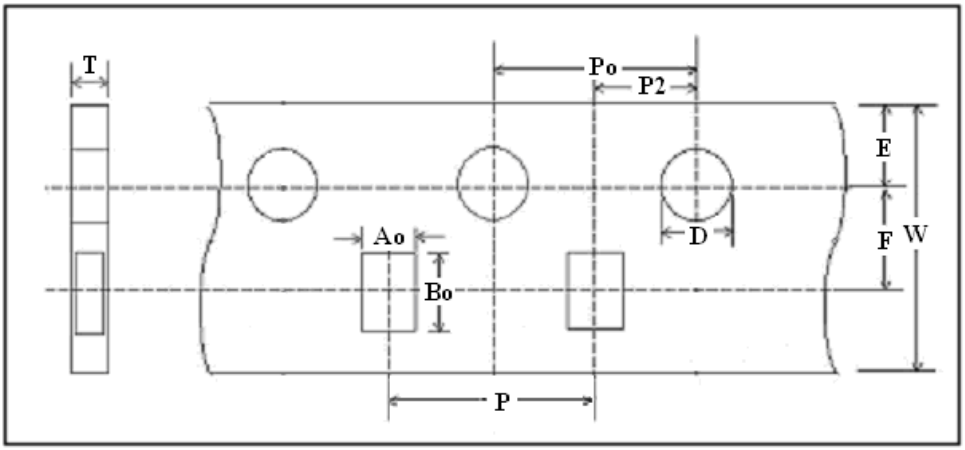
Test item	Test condition	Criteria
Resistance to Solder Heat	Solder temperature : 260 ± 5℃ Flux : Rosin DIP time : 10 ± 1 sec	1.More than 95 % of terminal electrode should be covered with new solder 2.No mechanical damage 3.Inductance value should be within ± 20 % of the initial value * Apply DC 0.4 ~ 0.6A to chip for 1 ~ 3 sec. before to measure inductance.
Solderability	Solder temperature : 235 ± 5℃ 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
Adhesive Test	Reflow temperature : 245℃ It shall be Soldered on the substrate applying direction parallel to the substrate Apply force(F) : 5 N Test time : 10 sec	1. No mechanical damage 2. Soldering the products on PCB after the pulling test force > 5 N
Temperature Cycle	Temperature:-40 ~ 85℃ For 30 minutes each Cycle: 100 cycles Measurement:At ambient temperature 24 hours after test completion	1.No mechanical damage 2.Inductance should be within ±20% of the initial value * Apply DC 0.4 ~ 0.6A to chip for 1 ~ 3 sec. before to measure inductance.
High Temperature Resistance	Temperature: 85 ± 5℃ Testing time: 1000 hrs Measurement: at ambient temperature 24 hours after test completion	1. No mechanical damage 2. Inductance should be within ±20% of the initial value * Apply DC 0.4 ~ 0.6A to chip for 1 ~ 3 sec. before to measure inductance.
Humidity	Temperature: 40℃ ± 2℃ Humidity: 90-95 % RH Testing time: 1000 hrs Measurement:At ambient temperature 24 hours after test completion	1.No mechanical damage 2.Inductance should be within ±20% of the initial value * Apply DC 0.4 ~ 0.6A to chip for 1 ~ 3 sec. before to measure inductance.
Rated Current	At ambient temperature & humidity Testing time:5 minutes (under full rated current)	WLFM product surface temp ‥ below room temperature plus 40℃

Tape and Reel Specifications

Plastic Carries(E)



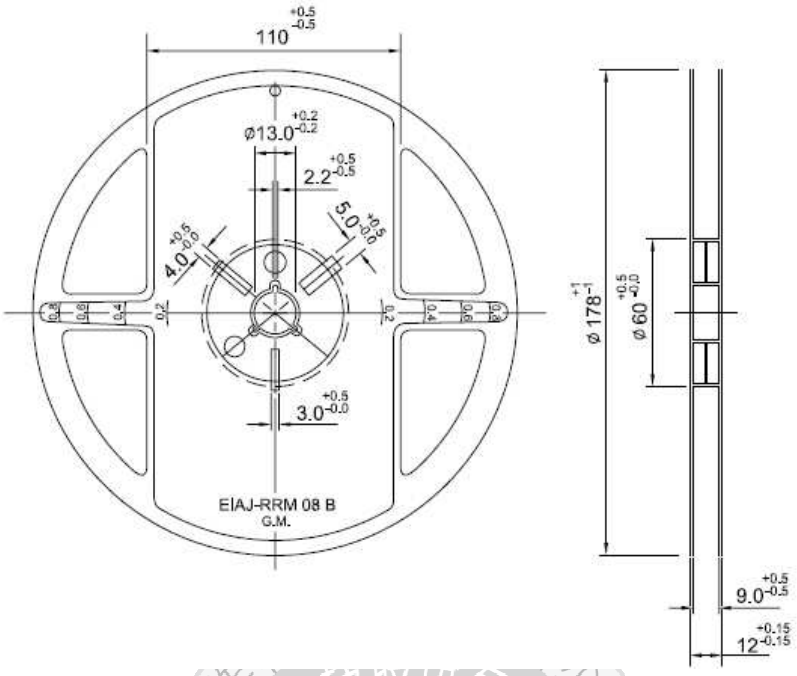
Paper Carrier(P)



Taping Dimensions

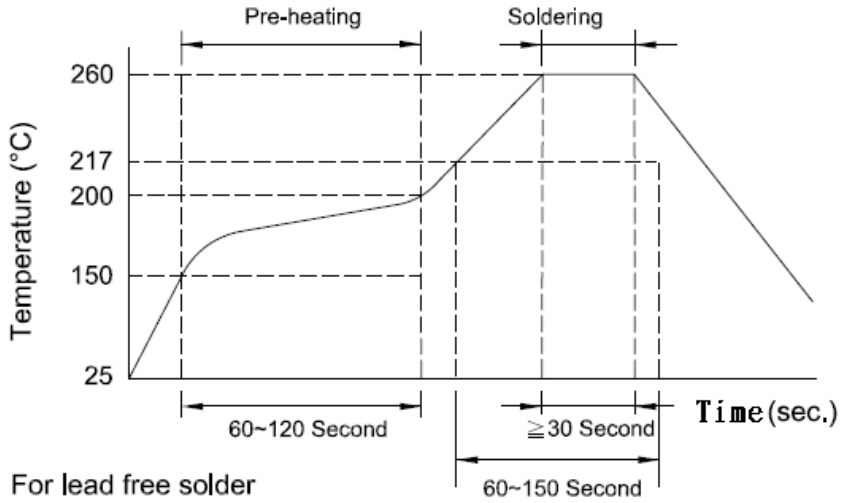
(mm)	2012	2016	2520
Symbol	E	E	E
W	8.00 ± 0.10	8.00 ± 0.10	8.00 ± 0.10
P	4.00 ± 0.10	4.00 ± 0.10	4.00 ± 0.10
E	1.75 ± 0.10	1.75 ± 0.10	1.75 ± 0.10
F	3.50 ± 0.10	3.50 ± 0.10	3.50 ± 0.10
D	1.55 ± 0.05	1.55 ± 0.05	1.55 ± 0.05
D1	1.00 ± 0.05	1.00 ± 0.05	1.00 ± 0.05
Po	4.00 ± 0.10	4.00 ± 0.10	4.00 ± 0.10
10Po	40.0 ± 0.20	40.0 ± 0.20	40.0 ± 0.20
P2	2.00 ± 0.10	2.00 ± 0.10	2.00 ± 0.10
Ao	1.40 ± 0.10	1.80 ± 0.10	2.25 ± 0.10
Bo	2.30 ± 0.10	2.20 ± 0.10	2.80 ± 0.10
Ko(T)	1.13 ± 0.10	1.15 ± 0.10	1.35 ± 0.10
t	0.22 ± 0.05	0.22 ± 0.05	0.22 ± 0.05

Reel Dimensions



7" Reel Packaging Quantity			
PART SIZE (EIA SIZE)	**2012 (0805)**	**2016 (0806)**	**2520 (1008)**
Qty.(pcs)	3,000	3,000	3,000
BOX	5 reels / inner box	5 reels / inner box	5 reels / inner box

Recommended Soldering Conditions



单击下面可查看定价，库存，交付和生命周期等信息

>>Walsin Technology(华新科技)