信 昌 電 子 陶 瓷 股 份 有 限 公 司
PROSPERITY DIELECTRICS CO., LTD.

SPECIFICATION FOR APPROVAL

CUSTOMER	
CUST. PART NO.	
CUST. DOC. REV.	
DESCRIPTION	CHIP INDUCTORS(RoHS+H.F.)
SAMPLE LOT NO.	
PART NO.	FL201209E-XXXM-LRH
DOC. REV.	ORIG
DATE	

Once you approve this part, please sign and return this page to the following marked location.

Customer Signature:_____ **Date:**_____

☐This part currently development section.

☐Production line can produce this series of products.

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TESTED BY	CHECKED BY	APPROVED BY

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CUSTOMER	CUSTOMER P/N	REV.	SPL. LOT NO.	
		-		
PART NAME	**PART NO.**	**REV.**	**DATE OF ISSUE**	**Q'TY**
CHIP INDUCTORS (RoHS+H.F.)	**FL201209E-XXXM-LRH**	**ORIG**		**0 PCS**

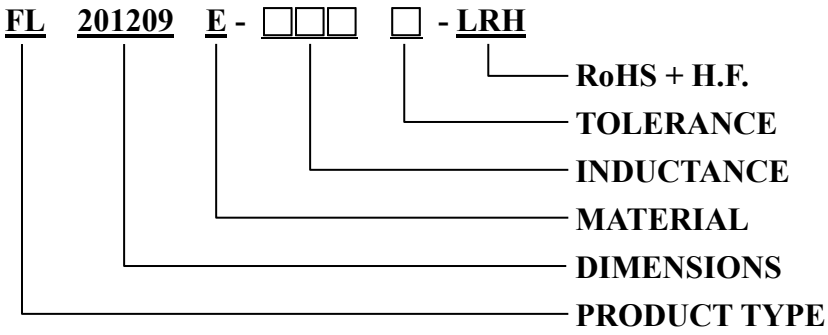
ENGINEERING CHANGE NOTICE – RECORD

REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
ORIG		***Bruce Hsu***		

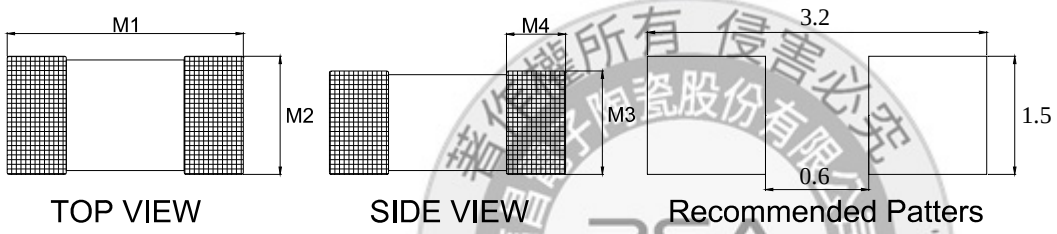
SPECIFICATION FOR APPROVAL

※This is a RoHS and REACH compliant product whose related documents are available on request.
※Graphic is only for dimensionally application.

1. PART NUMBERING IDENTIFICATION



2. MECHANICAL DIMENSION



UNIT: mm

	DIM.	TOL.
M1	2.00	±0.2
M2	1.25	±0.2
M3	0.90	±0.1
M4	0.50	±0.3

3. RATING TEMPERATURE

OPERATING TEMPERATURE RANGE: - 40℃ ~ +85℃
STORAGE CONDITION : LESS THAN 40℃ AND 70% RH
STORAGE TIME: 12 MONTHS MAX.

4. TEST INSTRUMENT

4-1. HP4291B-RF Impedance / Material Analyzer
4-2. HP4338A/B Milliohm meter
4-3. OSC Level: 100mV

5. ELECTRICAL SPECIFICATION

Part number	Inductance (μH)	Test Frequency (MHz)	SRF (MHz) MIN.	DC Resistance (Ω) ±25%	Rated Current (mA)
FL201209E-1R0M-LRH	1.00	1	90	0.100	1100
FL201209E-2R2M-LRH	2.20	1	70	0.170	900
FL201209E-3R3M-LRH	3.30	1	50	0.200	800
FL201209E-4R7M-LRH	4.70	1	40	0.230	700

NOTE:
1. Tolerance: M:±20%
2. Apply DC 0.4 ~ 0.6A to chip for 1 ~ 3 sec. before to measure inductance.

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6. RELIABILITY PERFORMANCE

Item	Test Condition	Requirements
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. 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	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
Adhesive Test	1. Reflow temperature: 245℃ It shall be Soldered on the substrate applying direction parallel to the substrate 2. Apply force(F): 5 N 3. Test time: 10 sec	1. No mechanical damage 2. Soldering the products on PCB after the pulling test force > 5 N
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. 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	1. Temperature: 85±5℃ 2. Testing time: 1000 hrs 3. 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	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. 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)	Product surface temp: below room temperature plus 40℃

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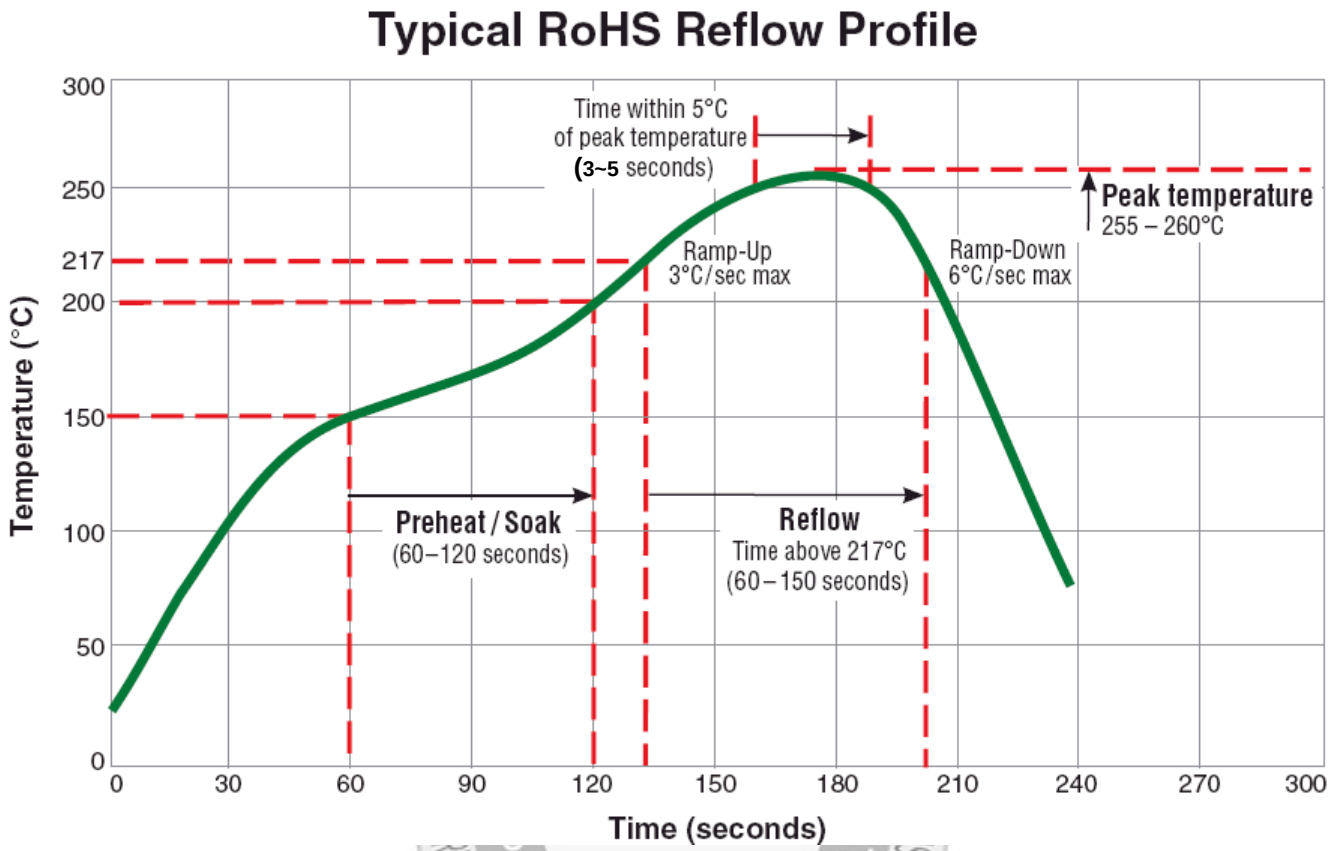
7. TYPICAL RoHS REFLOW PROFILE



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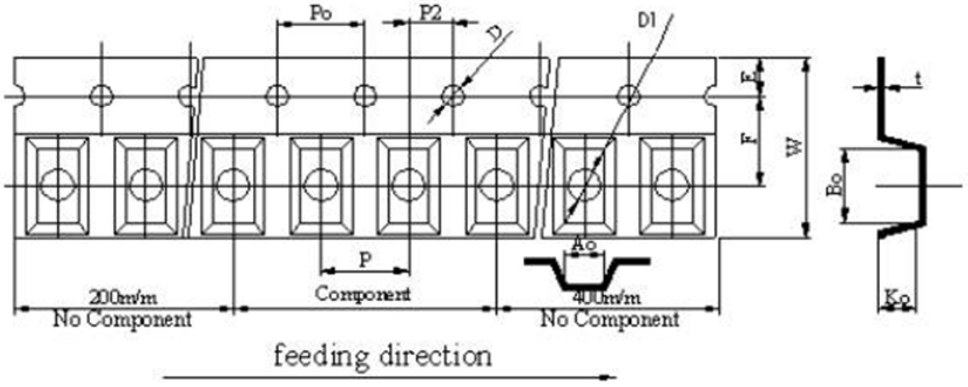
8. PACKING

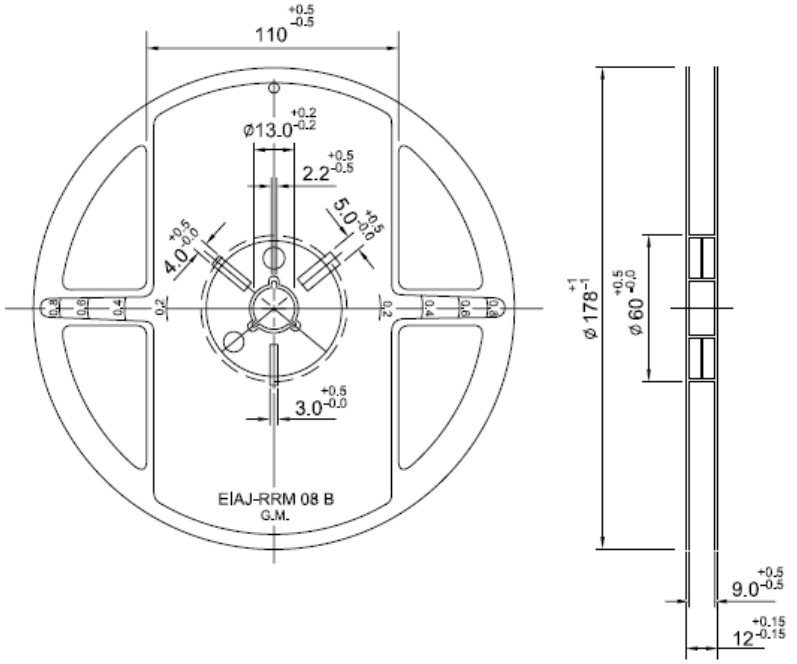
8-1. Plastic Carrier



UNIT: mm

W	P	E	F	D	D1	Po	P2	Ao	Bo	Ko	t
8.00±0.10	4.00±0.10	1.75±0.10	3.50±0.10	1.55±0.05	1.00±0.05	4.00±0.10	2.00±0.10	1.40±0.10	2.30±0.10	1.13±0.10	0.22±0.05

8-2. Reel Dimension (UNIT: mm)



8-3. Packaging Quantity

Qty.	Inner Box
3000 Pcs	5 Reels