PSA

SPECIFICATION FOR APPROVAL

CUSTOMER	ROPLA
CUST. PART NO.	FL201212-XXXX-LRH
CUST. DOC. REV.	
DESCRIPTION	CHIP INDUCTORS(RoHS+HF)
SAMPLE LOT NO.	S201907-0085
PART NO.	FL201212-XXXX-LRH
DOC. REV.	ORIG
DATE	2019/7/17

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
Jenny Tseng	Adam Lee	K.C Tseng

PROSPERITY DIELECTRICS CO., LTD.

FRONTIER ELECTRONICS

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CUSTOMER	CUSTOMER P/N	REV.	SPL. LOT NO.	
ROPLA	FL201212-XXXX-LRH	-	S201907-0085	
PART NAME	**PART NO.**	**REV.**	**DATE OF ISSUE**	**Q'TY**
CHIP INDUCTORS (RoHS+H.F.)	FL201212-XXXX-LRH	ORIG	2019/7/17	0 PCS

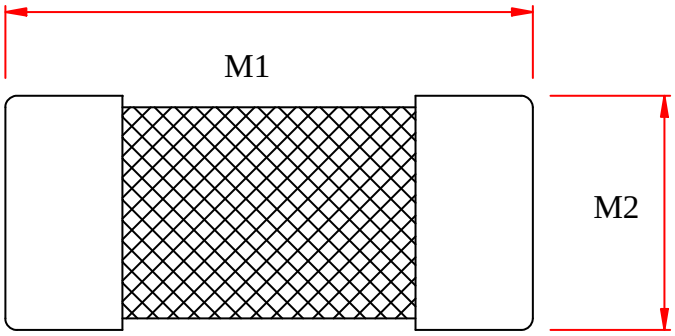
ENGINEERING CHANGE NOTICE – RECORD

REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
ORIG		*Adam Lee*	2019/7/17	

SPECIFICATION FOR APPROVAL

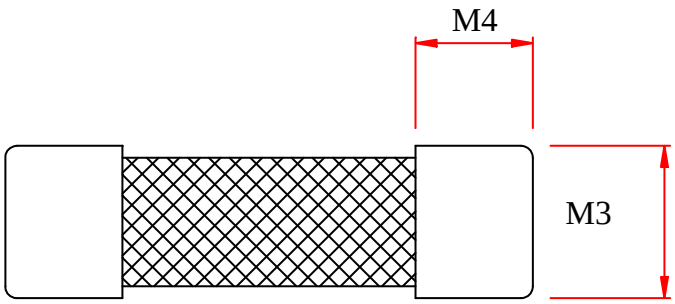
※This is a RoHS and REACH compliant product whose related documents are available on request.
※Graphic is only for dimensionally application.

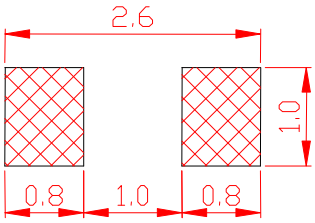
1. MECHANICAL DIMENSION



UNIT: mm

	DIM.	TOL.
M1	2.0	±0.2
M2	1.2	±0.2
M3	1.2	±0.2
M4	0.5	±0.3





2. ELECTRICAL

OLD P/N (NEW P/N)	Ind. (μH)	Q Min	Test Freq. (MHz)	SRF MHz Min	DCR Ohm Max	Rated Current (mA)MAX.
FL201212-2R7K-LRH	2.7	45	10	45	0.75	30
FL201212-3R3K-LRH	3.3	45	10	41	0.80	30
FL201212-3R9K-LRH	3.9	45	10	38	0.90	30
FL201212-4R7K-LRH	4.7	45	10	35	1.00	30
FL201212-5R6K-LRH	5.6	50	4	32	0.90	15
FL201212-6R8K-LRH	6.8	50	4	29	1.00	15
FL201212-8R2K-LRH	8.2	50	4	26	1.10	15
FL201212-100K-LRH	10	50	2	24	1.15	15
FL201212-220K-LRH	22	35	1	16	1.10	5

TOLERANCE：K=±10%

TEST INSTRUMENT: HP4291B & CHROMA-16502

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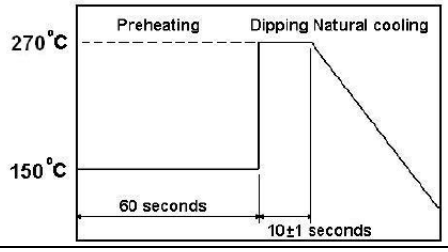
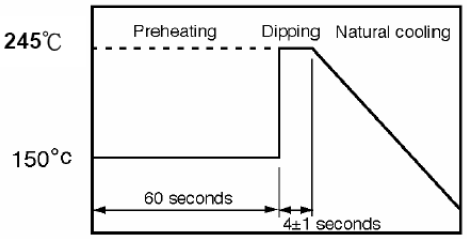
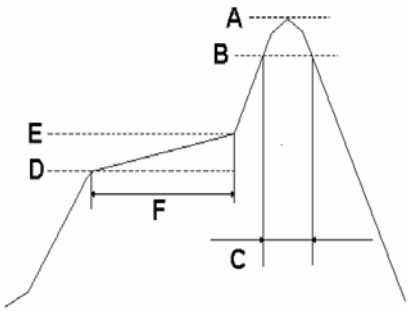
3. RELIABILITY PERFORMANCE

Test Item	Performance	Test Condition
Operating temperature range	-55℃ to + 125℃	
Storage temperature and umidity ranges	40℃ MAX., 70% RH MAX.	
Soldering heat resistance	The chip shall not be cracks. More than 75% of terminal electrode shall be covered with solder.	Preheat: 150℃, 60 seconds Solder temperature : 270 ± 5℃ Flux: Rosin Dip time: 10 ± 1 seconds 
Solderability	More than 90% of the terminal electrode shall be covered with new solder.	Preheat: 150℃, 60 seconds Solder temperature: 245 ± 5℃ Flux: Rosin Dip time: 4 ± 1 seconds 

Recommended Soldering Conditions
(REFLOW TEMPERATURE PROFILE) Lead-Free

A	260 ± 5℃
B	230 ± 5℃
C	30 ±10 sec
D	150℃
E	180℃
F	90 ± 30sec



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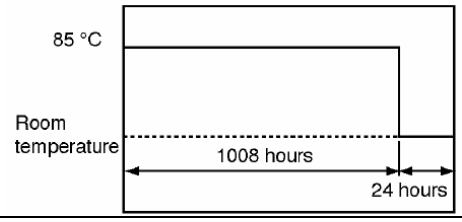
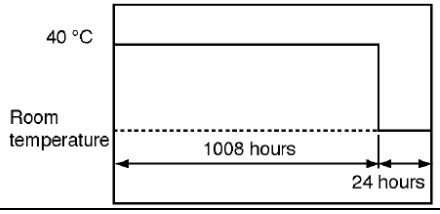
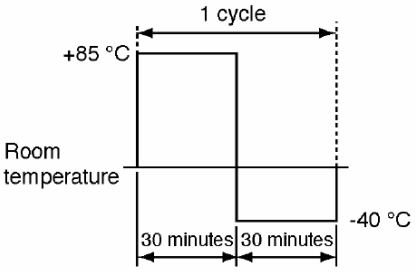
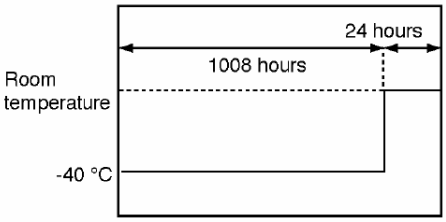
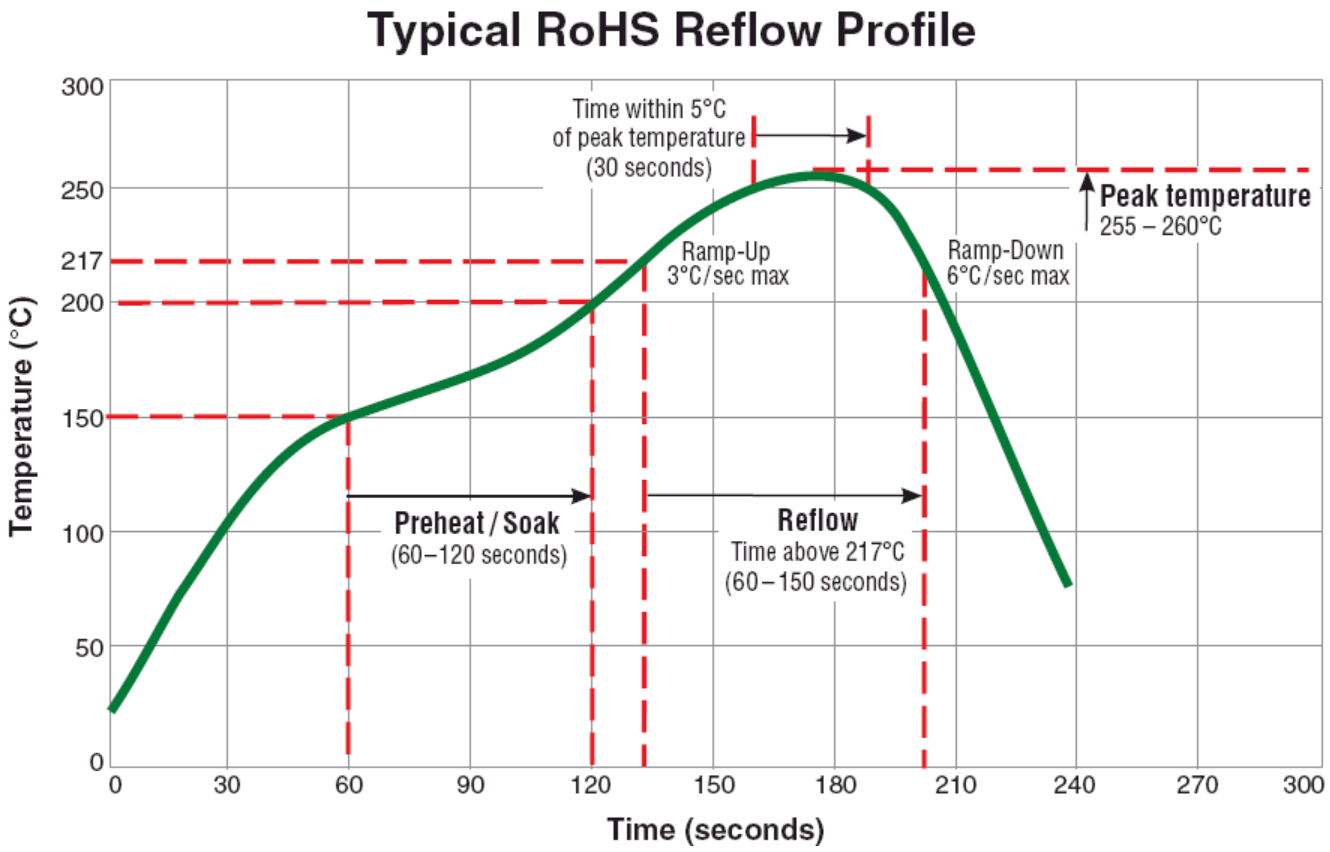
Test Item	Performance	Test Condition
High temperature resistance	**Appearance: Ferrite shall not be damaged.** **Impedance: Within±20% of the initial value.**	**Temperature: 85±2℃** **Testing time: 1008±12 hours** **Measurement: After placing for 24 hours min.** 
Humidity resistance	**Appearance: Ferrite shall not be damaged.** **Impedance: Within±20% of the initial value**	**Humidity: 90 to 95% RH** **Temperature: 40±2℃** **Testing time: 1008±12 hours** **Measurement: After placing for 24 hours min.** 
Thermal Shock	**Appearance: Cracking, chipping or any other defects harmful to the characteristics shall not be allowed. Impedance: Within±20% of the initial value**	**Temperature: -40℃, +85℃, kept stabilized for 30 minutes each** **Cycle: 100 cycles** **Measurement: After placing for 24 hours min.** 
Low temperature storage life test	**Appearance: Cracking, chipping or any other defects harmful to the characteristics shall not be allowed. Impedance: Within±20% of the initial value.**	**Temperature: -40±2℃** **Testing time: 1008±12 hours** **Measurement: After placing for 24 hours min.** 

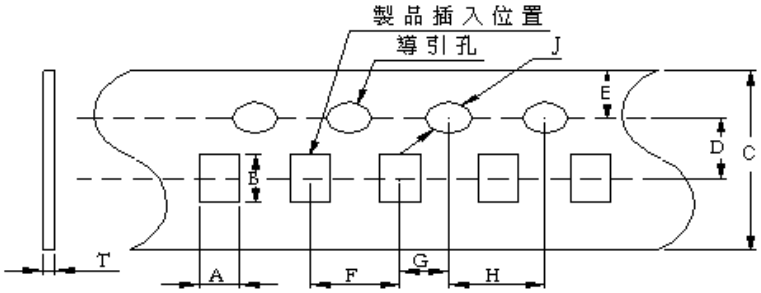
4. TYPICAL RoHS REFLOW PROFILE



SPECIFICATION FOR APPROVAL

5. PAPER CARRIER TAPE PACKAGING

5.1 DIMENSIONS

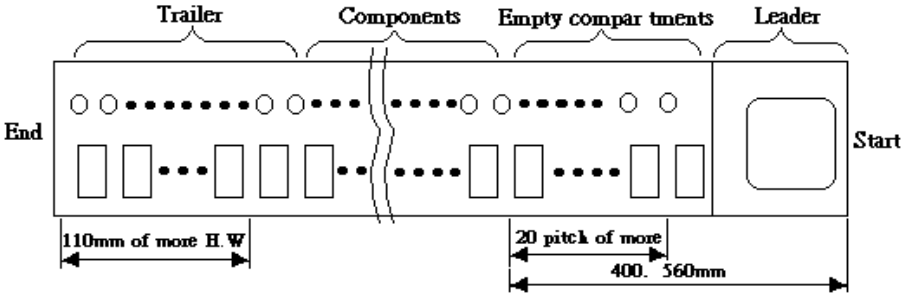


Unreeling direction

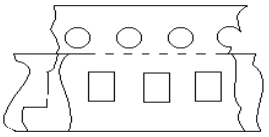
UNIT : mm

	A	B	C	D	E	F	G	H	J	T
DIM.	1.45	2.25	8.00	3.50	1.75	4.00	2.00	4.00	1.55	0.95
TOL	±0.05	±0.05	±0.10	±0.05	±0.10	±0.10	±0.05	±0.10	±0.05	±0.05

5.2 LEADER AND TRAILER TAPE

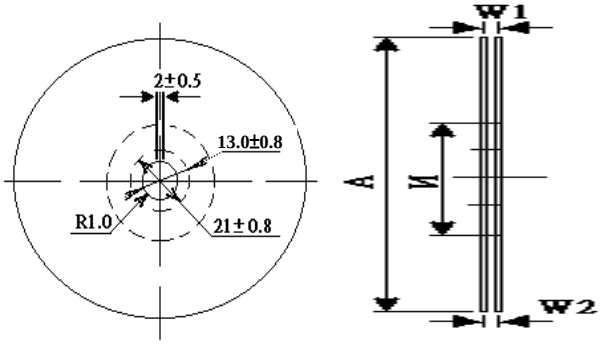


5.3 DIRECTION THE DIRECTION SHALL BE SEEN FROM THE TOP OF COVER TAPE



Unreeling direction

5.4 REELS



UNIT : mm

	DIM.	TOL.
A	178	±2.0
N	50	MIN.
W1	10	±1.5
W2	20	WAX.

PACKING Q'TY : 4,000 PCS REEL