



# SPECIFICATION FOR APPROVAL

CUSTOMER	ROPLA
CUST. PART NO.	FL201209-XXXX-LRH
CUST. DOC. REV.	
DESCRIPTION	CHIP INDUCTORS(RoHS+H.F.)
SAMPLE LOT NO.	S201907-0085
PART NO.	FL201209-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
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# SPECIFICATION FOR APPROVAL

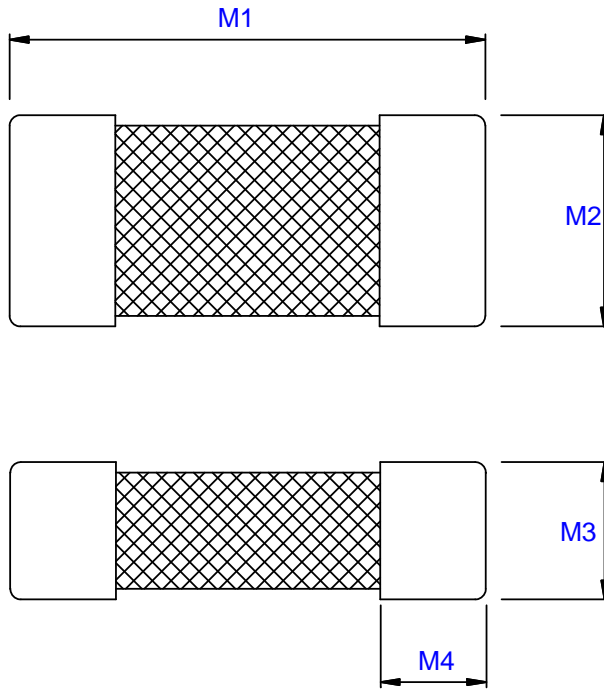
<b>CUSTOMER</b> ROPLA	<b>CUSTOMER P/N</b> FL201209-XXXX-LRH	<b>REV.</b> -	<b>SPL. LOT NO.</b> S201907-0085	
<b>PART NAME</b> CHIP INDUCTORS (RoHS+H.F.)	<b>PART NO.</b> FL201209-XXXX-LRH	<b>REV.</b> ORIG	<b>DATE OF ISSUE</b> 2019/7/17	<b>Q'TY</b> 0 PCS

## ENGINEERING CHANGE NOTICE – RECORD

<b>REVISION NO.</b>	<b>REVISION DESCRIPTION</b>	<b>AUTHOR</b>	<b>DATE</b>	<b>REMARK</b>
ORIG		<i>Adam Lee</i>	2019/7/17	

※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.
<b>M1</b>	2.0	±0.2
<b>M2</b>	1.2	±0.2
<b>M3</b>	0.9	±0.2
<b>M4</b>	0.5	±0.3

**2. ELECTRICAL**

Part Number	L (μH)	Q MIN	L、Q TEST Frequency (MHz)	SRF (MHz) MIN.	DCR (Ω) MAX.	RETED CURRENT (mA) MAX.
FL201209-47NM-LRH	0.047	15	50	320	0.20	300
FL201209-68NM-LRH	0.068	15	50	280	0.20	300
FL201209-R10K-LRH	0.10	20	25	235	0.30	250
FL201209-R12K-LRH	0.12	20	25	220	0.30	250
FL201209-R15K-LRH	0.15	20	25	200	0.40	250
FL201209-R18K-LRH	0.18	20	25	185	0.40	250
FL201209-R22K-LRH	0.22	20	25	170	0.50	250
FL201209-R27K-LRH	0.27	20	25	150	0.50	250
FL201209-R33K-LRH	0.33	20	25	145	0.55	250
FL201209-R39K-LRH	0.39	25	25	135	0.65	200
FL201209-R47K-LRH	0.47	25	25	125	0.65	200
FL201209-R56K-LRH	0.56	25	25	115	0.75	150
FL201209-R68K-LRH	0.68	25	25	105	0.80	150
FL201209-R82K-LRH	0.82	25	25	100	1.00	150
FL201209-1R0K-LRH	1.0	45	10	75	0.40	50
FL201209-1R2K-LRH	1.2	45	10	65	0.50	50
FL201209-1R5K-LRH	1.5	45	10	60	0.50	50
FL201209-1R8K-LRH	1.8	45	10	55	0.60	50
FL201209-2R2K-LRH	2.2	45	10	50	0.65	30

TEST INSTRUMENT: HP4291B & CHROMA-16502

Inductance tolerance: K:±10%、L:±15%、M:±20%

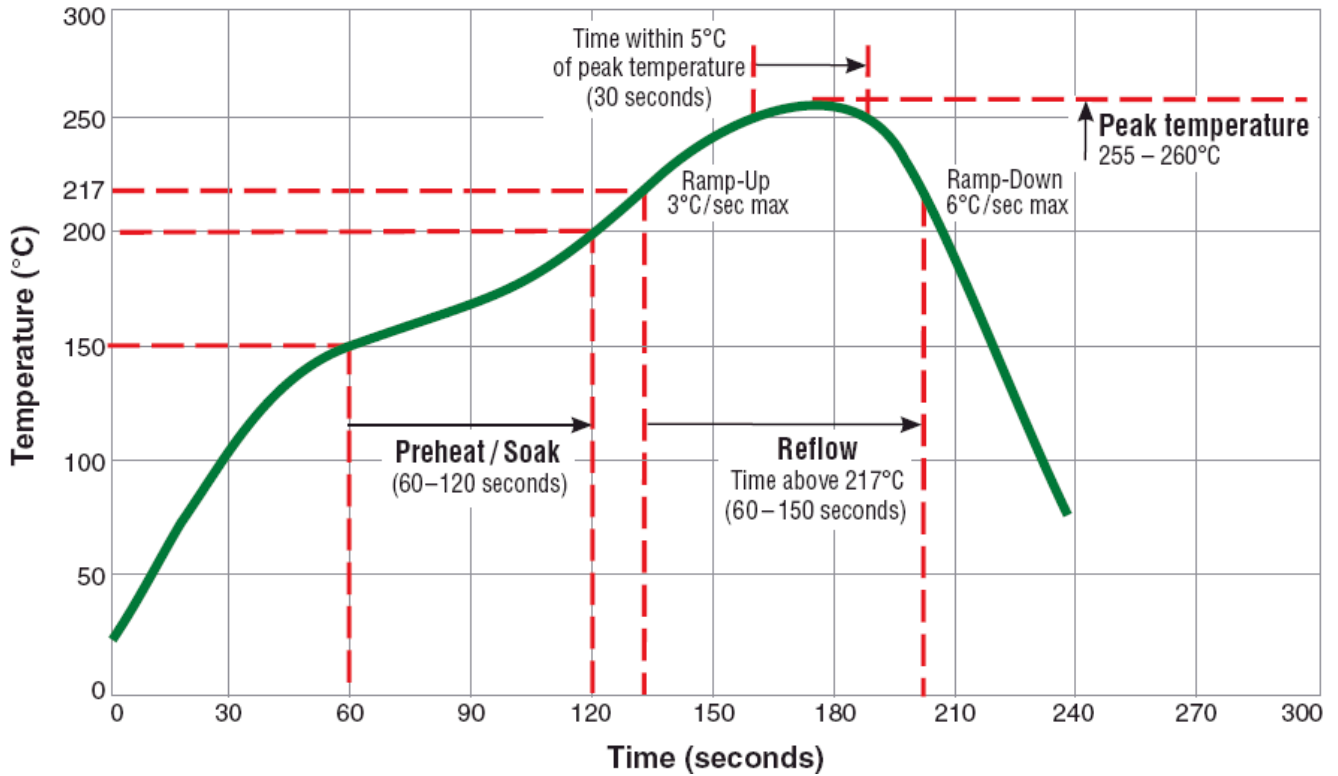
※MSL : LEVEL 1

## 3. RELIABILITY PERFORMANCE

Test Item	Test Condition	Standard Source
Humidity Test	+40°C±2°C, 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°C±5°C (30 minutes) ~ -40 ± 5°C (30 minutes), temperature switch time: 5 minutes (total 50 cycles).	MIL-STD-202G Method 107G Test Condition B-2
Life Test	+70°C±5°C (300Hours)	MIL-STD-202G Method 108A Test Condition D
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	Reflow: Keep 250 ±5°C, 30 ±5Sec in air, Temperature ramp:+1~4°C/sec; Above1 83°C, must keep 90 s - 120 s.	MIL-STD-202G Method 210F Test Condition (Reflow)
Solder Ability Test	Soak in 245 °C solder pot of 3Sec, PAD must have 95% above coverage.	J-STD-003B
Terminal Push Strength Test	No special requirements: 5N thrust to maintain 10 Sec.	JIS C5321:1997

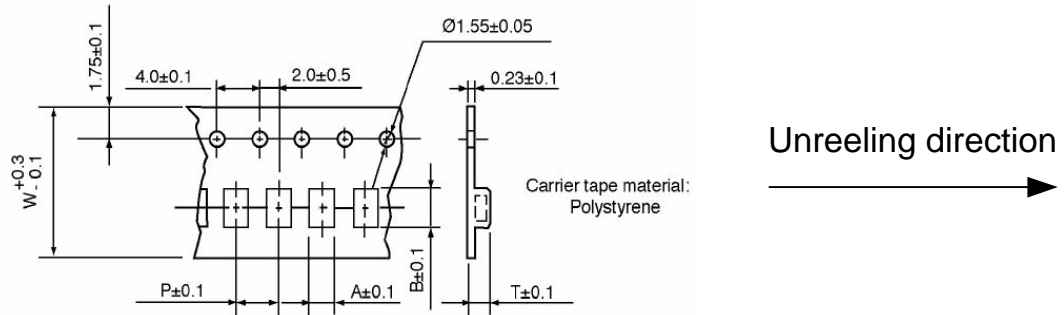
**4. TYPICAL RoHS REFLOW PROFILE**

**Typical RoHS Reflow Profile**



**5. PAPER CARRIER TAPE PACKAGING**

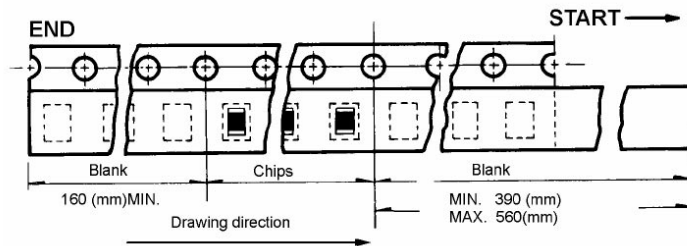
**5.1 DIMENSIONS**



UNIT : mm

	A	B	W	P	T	CHIPS/REEL
DIM.	1.42	2.25	8.00	4.00	1.04	4000

**5.2 LEADER AND TRAILER TAPE**

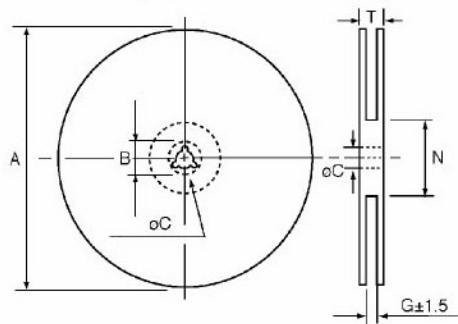


**5.3 DIRECTION THE DIRECTION SHALL BE SEEN FROM THE TOP OF COVER TAPE**



**5.4 REELS**

Material: Paper, Plastic



UNIT : mm

	8mm	12mm
A	178±2	178±2
B	21.0±0.8	21.0±0.8
C	13.0±0.8	13.0±0.8
G	10.0	14.0
N	75	75
T	12.5	16.5