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.	1008F-XXXX-LRH
DOC. REV.	
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.)	**1008F-XXXX-LRH**	**ORIG**		**0 PCS**

ENGINEERING CHANGE NOTICE – RECORD

REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK

SPECIFICATION FOR APPROVAL

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

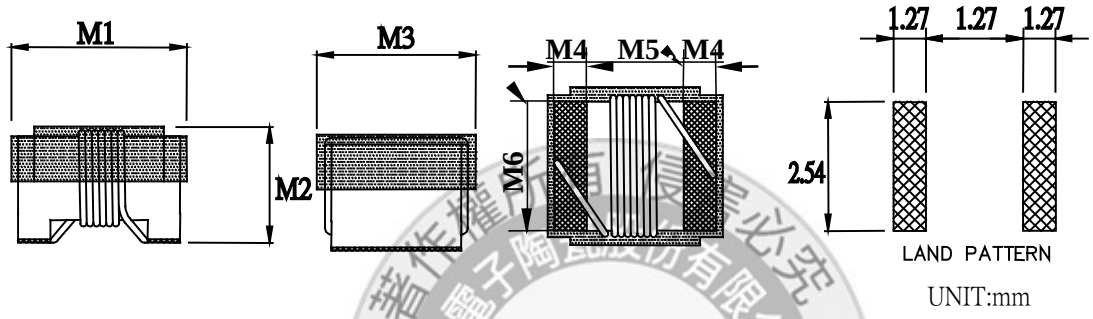
1. SCOPE: THIS SPECIFICATION APPLIES TO WIRE WOUND CHIP INDUCTORS.

2. PART NUMBER IDENTIFICATION

1008 F - □□□ □ - LRH

- **RoHS+H.F.**
- **TOLERANCE**
- **INDUCTANCE**
- **MATERIAL**
- **DIMENSIONS**

3. MECHANICAL DIMENSION



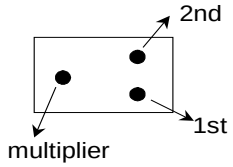
UNIT:mm

SERIES	M1	M2	M3	M4	M5	M6
1008F-XXXX-LRH	2.92 MAX.	1.83±0.2	2.59±0.2	0.50±0.05	1.51±0.05	2.03±0.05

4. RATING TEMPERATURE

OPERATING TEMPERATURE : -25℃ ~ +125℃

5. MARKING



COLOR CODE

Example: 1008F-2R7□-LRH

MARKING: Dots 1 and 2 indicate the inductance in nano Henries.
(DOTS 1：RED，DOTS 2：VIOLET)
Dots 3 indicates number of zeroes to be added.
(DOTS 3：RED)

MARK COLOR CODE IN COMPOSITE SPECIFICATION 9

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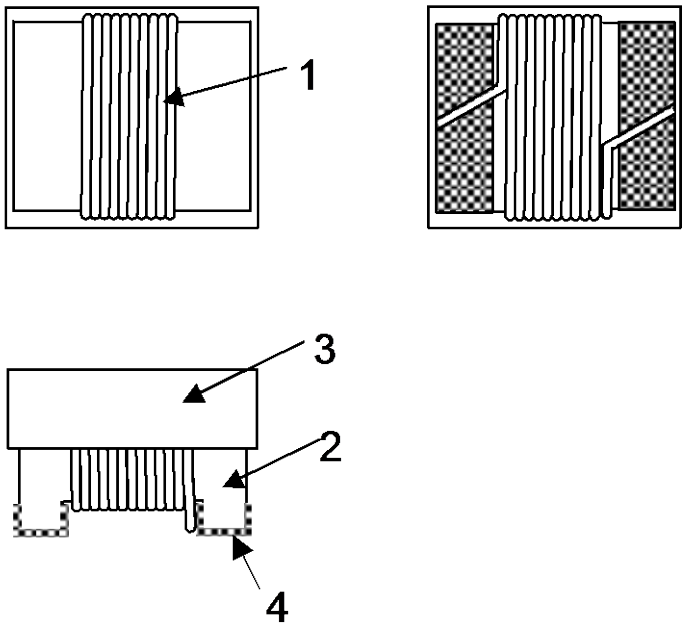
6. STRUCTURE



7. MATERIAL LIST

ITEM	MATERIAL CATEGORY	MATERIAL TYPE	UL NO.
1	WIRE	POLYSOL	E143312
2	CORE	FERRITE CORE	
3	UV	UV	
4	TERMINAL PLATEING	AgPd+Ni+Sn	

8. TEST INSTRUMENT

8-1 L、Q TEST BY HP4291B

8-2 SRF TEST BY HP 8753E

8-3 DCR TEST BY ZENTECH 502BC

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9. ELECTRICAL SPECIFICATION

Part number	Inductance (μH)	Test Frequency (MHz)	Inductance Tolerance	Q MIN.	Test Frequency (MHz)	SRF (MHz) MIN.	DC Resistance (Ω) MAX.	Irms (mA)	COLOR CODE		
									1st	2nd	multiplier
1008F-47N□-LRH	0.047	50	K,J	50	50	1800	0.045	650	Yellow	Violet	Black
1008F-68N□-LRH	0.068	50	K,J	50	50	1800	0.045	650	Blue	Gray	Black
1008F-82N□-LRH	0.082	50	K,J	50	50	1800	0.035	1000	Gray	Red	Black
1008F-R10□-LRH	0.10	50	K,J,H	50	50	1800	0.196	700	Brown	Black	Brown
1008F-R18□-LRH	0.18	50	K,J	50	50	1000	0.290	700	Brown	Gray	Brown
1008F-R20□-LRH	0.20	50	K,J	50	50	900	0.285	700	Red	Black	Brown
1008F-R24□-LRH	0.24	50	K,J	50	50	900	0.135	700	Red	Yellow	Brown
1008F-R56□-LRH	0.56	7.9	K,J	40	50	460	0.300	700	Green	Blue	Brown
1008F-R68□-LRH	0.68	7.9	K,J	27	50	400	0.320	700	Blue	Gray	Brown
1008F-1R0□-LRH	1.0	50	K,J	50	50	380	0.620	650	Brown	Black	Red
1008F-1R2□-LRH	1.2	7.9	K,J	48	50	210	0.68	650	Brown	Red	Red
1008F-1R5□-LRH	1.5	7.9	K,J	41	50	190	0.76	630	Brown	Green	Red
1008F-1R8□-LRH	1.8	7.9	K,J	39	50	170	0.84	600	Brown	Gray	Red
1008F-2R2□-LRH	2.2	7.9	K,J	34	50	150	1.10	520	Red	Red	Red
1008F-2R7□-LRH	2.7	7.9	K,J	34	50	135	1.28	490	Red	Violet	Red
1008F-3R3□-LRH	3.3	7.9	K,J	32	50	120	1.46	450	Orange	Orange	Red
1008F-3R9□-LRH	3.9	7.9	K,J	32	7.9	105	1.56	420	Orange	White	Red
1008F-4R3□-LRH	4.3	7.9	K,J	30	7.9	85	1.70	400	Yellow	Orange	Red
1008F-4R7□-LRH	4.7	7.9	K,J	31	7.9	90	1.68	400	Yellow	Violet	Red
1008F-5R6□-LRH	5.6	7.9	K,J	31	7.9	80	1.82	380	Green	Blue	Red
1008F-6R8□-LRH	6.8	7.9	K,J	31	7.9	70	2.00	360	Blue	Gray	Red
1008F-8R2□-LRH	8.2	7.9	K,J	23	7.9	65	2.65	330	Gray	Red	Red
1008F-100□-LRH	10.0	7.9	K,J	31	7.9	60	2.95	300	Brown	Black	Orange
1008F-120□-LRH	12.0	7.9	K,J	30	7.9	50	3.35	270	Brown	Red	Orange
1008F-150□-LRH	15.0	7.9	K,J	38	7.9	50	3.04	250	Brown	Green	Orange
1008F-220□-LRH	22.0	2.52	K,J	10	2.52	10	2.80	120	Red	Red	Orange

NOTE:

1. □Tolerance: M:±20% , K:±10%, J:±5%, H:±3%

2. MSL: Level 1

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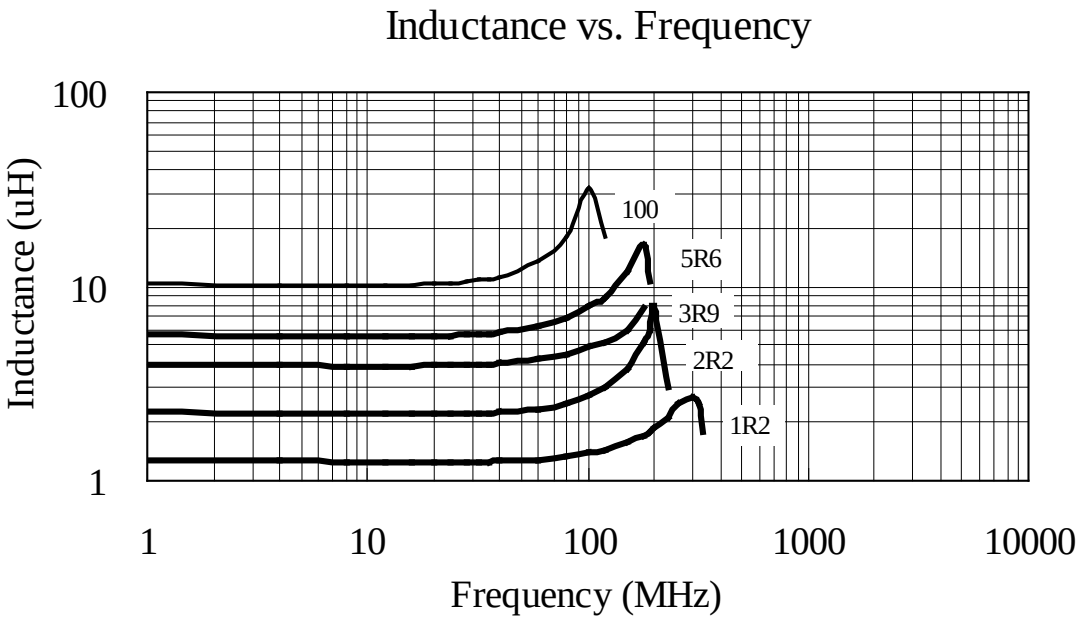
10. CHARACTERISTIC CURVE



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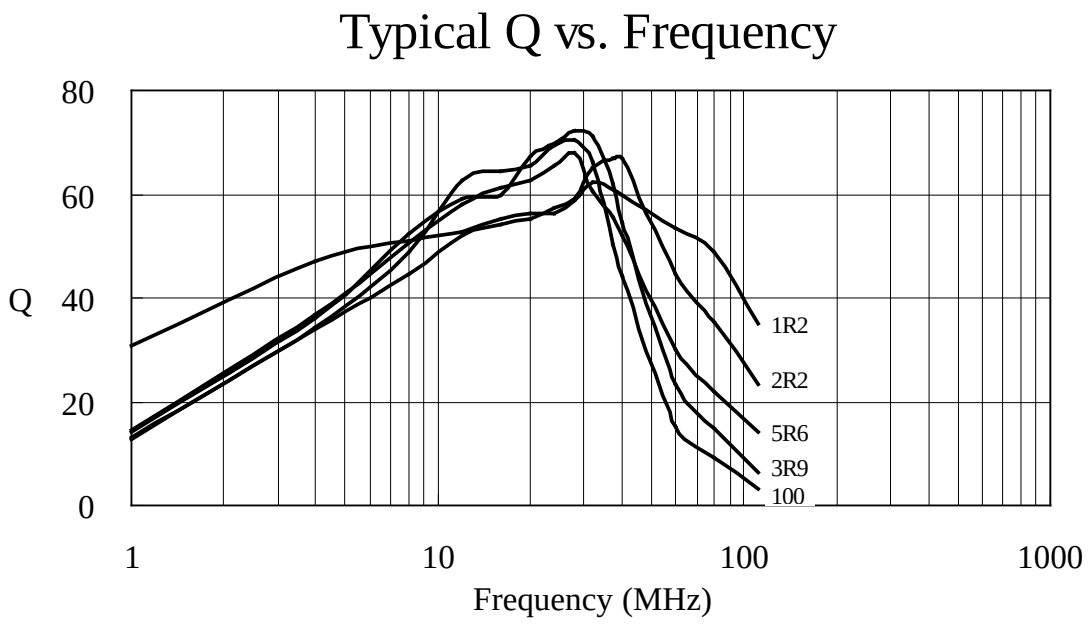

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11. RELIABILITY PERFORMANCE

Reliability Experiment For Electrical

Test Item	Accept criteria	Test Condition	Standard Source
Humidity Test	1.Change from an initial value L:within±5% 2.no visible damage.	+40℃± 2℃, humidity of 90% ±5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1.Change from an initial value L:within±5% 2.no visible damage.	1.Temperature: +125℃±2℃. 2.Test time: 48±2hrs.	IEC 68-2 Test Condition B
Low Temperature Test	1.Change from an initial value L:within±5% 2.no visible damage.	1.Temperature: -25℃±2℃. 2.Test time: 48±2hrs.	IEC 68-2 Test Condition A
Thermal Shock	1.Change from an initial value L:within±5% 2.no visible damage.	+125℃±5℃ (30 minutes) ~ -55±5℃ (30 minutes), temperature switch time: 5 minutes (total 50 cycles) Wind speeds 10m/sec.	Reference MIL-STD-202G Method 107G Test Condition A-2
Life Test	1.Change from an initial value L:within±5% 2.no visible damage.	+70℃±5℃ (250Hours).	Reference MIL-STD-202G Method 108A Test Condition B

Reliability Experiment For Physical

Test Item	Accept criteria	Test Condition	Standard Source
Vibration Test	1.Change from an initial value L:within±5% 2.no visible damage.	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	1.no visible damage.	IR/convection reflow: Peak Temp 255℃ ~260℃ for 3~5 Sec. in air, Through 2 Cycle. Temperature Ramp:+1~4℃/sec.; Above 217℃, must keep 90 s - 120 s.	Reference MIL-STD-202G Method 210F Test Condition K (Reflow)
Solder Ability Test	1. Lead must have 95% above coverage.	Soak in 245℃ solder pot of 3~5 Sec.	Reference J-STD-002D

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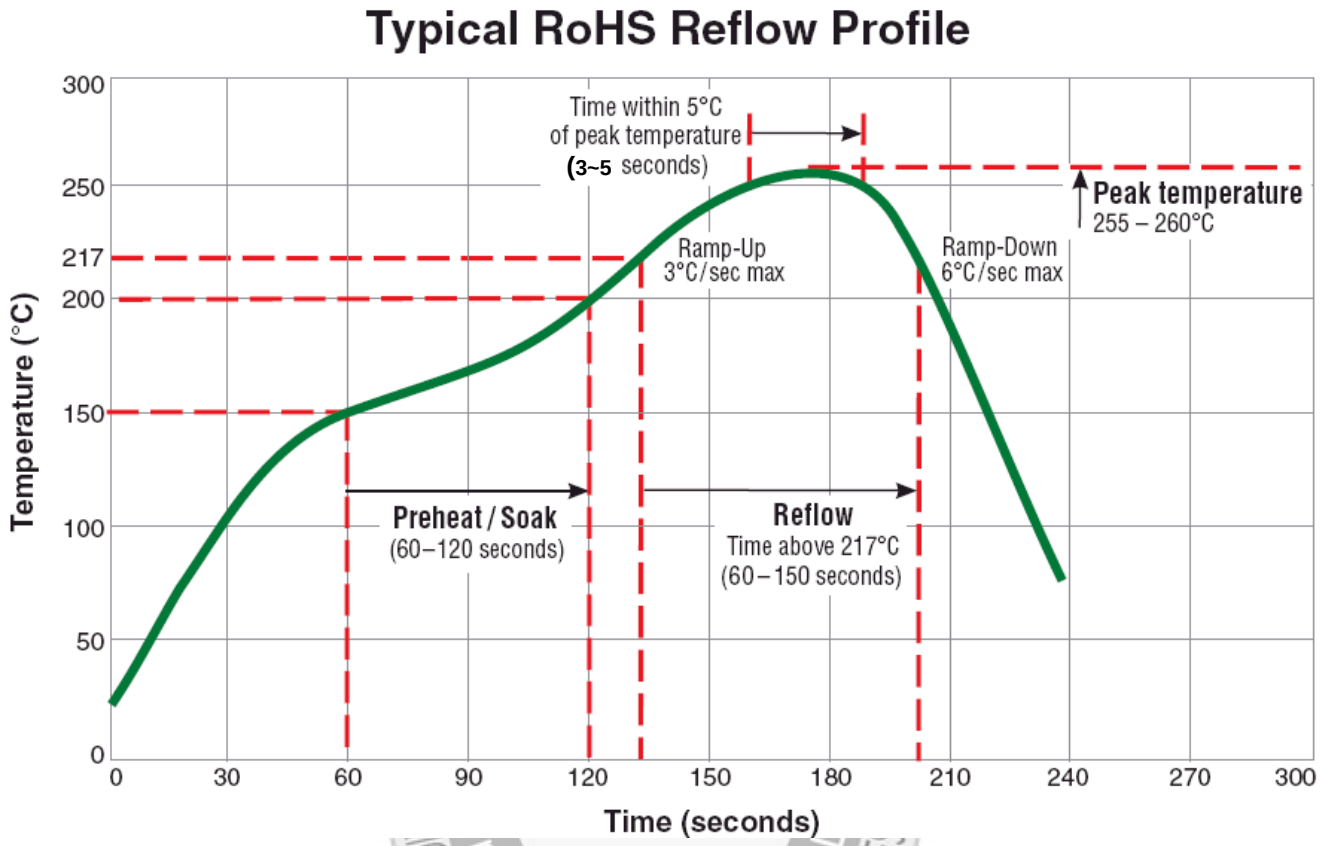
12. TYPICAL RoHS REFLOW PROFILE



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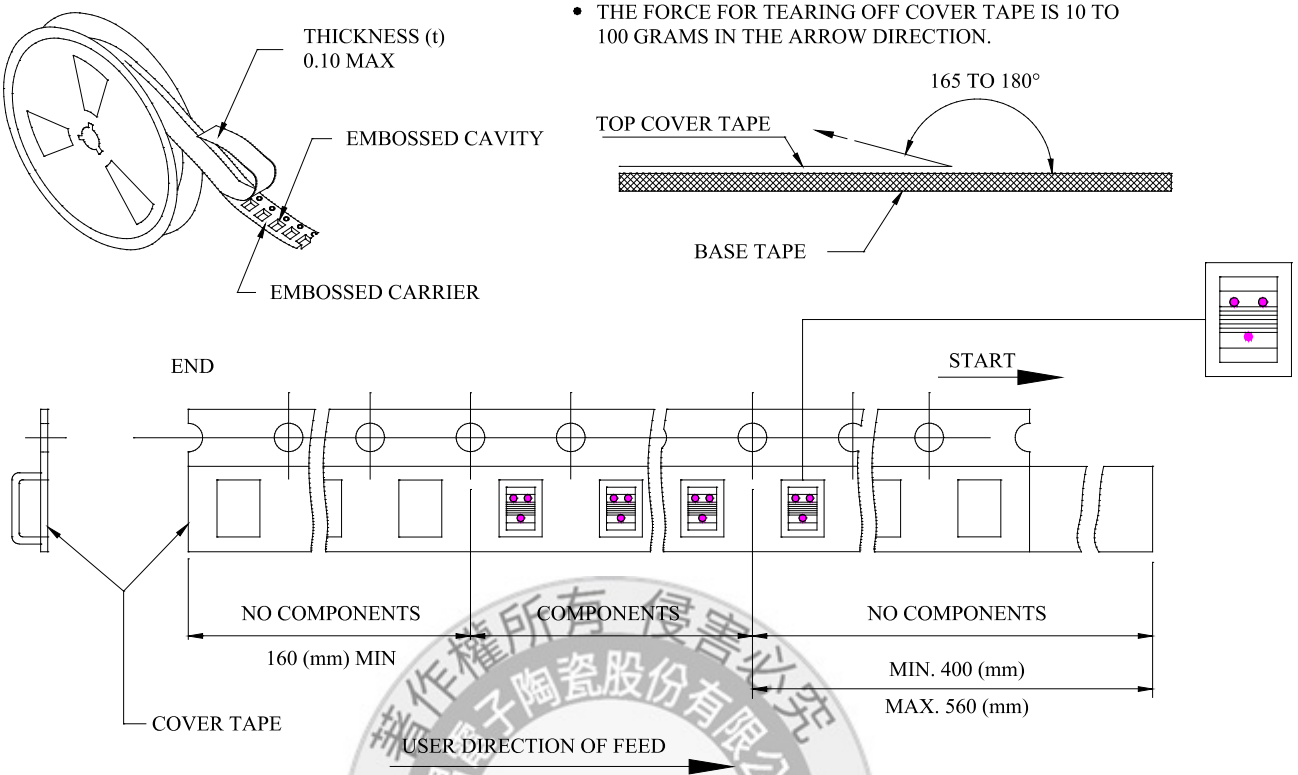
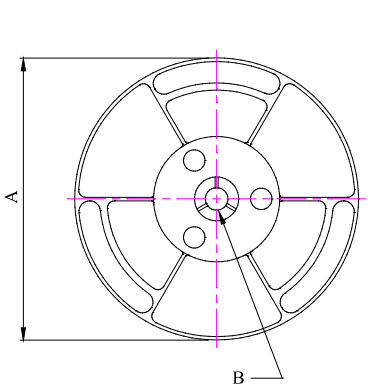
13. PACKING

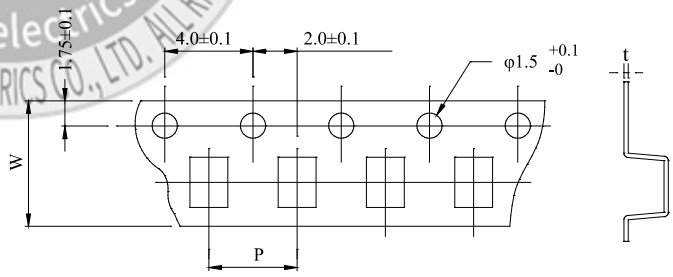


■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



■ DIMENSIONS OF CARRIER TAPE (mm)



UNIT: mm

	A	B	C	D	N	P	W	t
DIM.	178	13.0	8.4	12.5	50	4.0	8.0	0.26
TOL.	±2.0	±0.8	+1.0–0	MAX	MIN	±0.1	±0.2	±0.05

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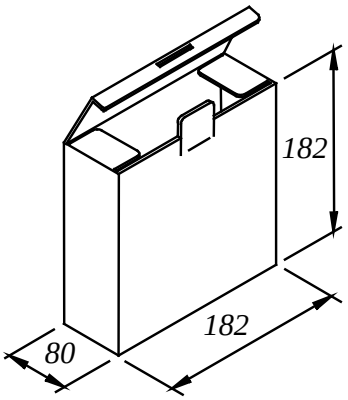
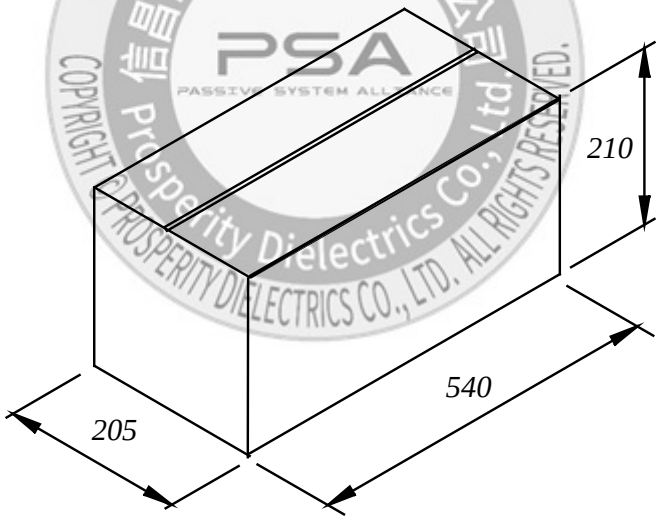
UNIT : mm



CONSTURCTION：
Q'TY: 2000pcs/REEL
QTY: 10,000pcs/BOX

Q'TY : 2,000 / REEL



TOTAL Q'TY : 60,000PCS