

SPECIFICATION FOR APPROVAL

CUSTOMER	_____
CUST. PART NO.	_____
CUST. DOC. REV.	_____
DESCRIPTION	SMD CHOKE (RoHS+H.F.)
SAMPLE LOT NO.	_____
PART NO.	CN0312QM-XXXKH
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.

Sales Office-Headquarter

No. 566-1, Kao-Shi Rd., Yangmei, Taoyuan 32668,
Taiwan
TEL: +886-3-475-3355
FAX: +886-3-485-4959

Yong Zhou Plant

Tao-Yuan Rd., Fenghuang Park, Lengshuitan
District, Yongzhou, Hunan 425000, P.R.C.
TEL: +86-746-8610-180
FAX: +86-746-8610-181

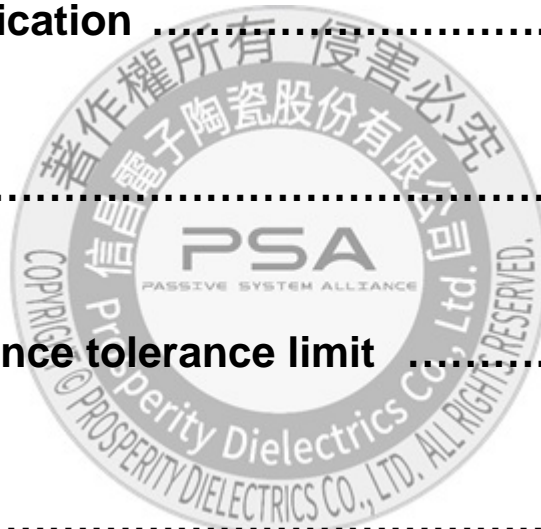
Sales Office-Dong Guan,China

No.638,Mei Jing West Road Xiniupo Administrative
Zone Dalang Town,Dong Guan City,GuangDong
Province,China.
TEL: +86-769-8555-0979
FAX: +86-769-8555-0972

TESTED BY	CHECKED BY	APPROVED BY

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CUSTOMER	CUSTOMER P/N	REV. -	SPL. LOT NO.	
PART NAME SMD CHOKE (RoHS+H.F.)	PART NO. CN0312QM- XXXKH	REV.	DATE OF ISSUE	Q'TY 0 PCS

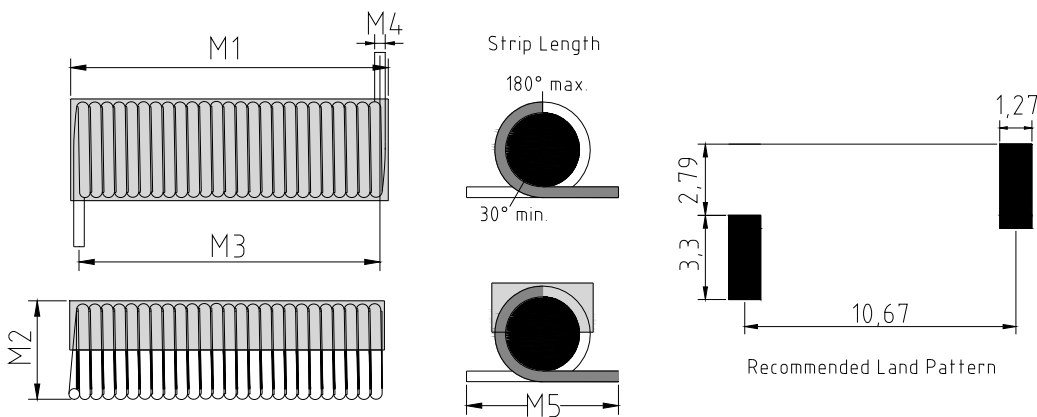
ENGINEERING CHANGE NOTICE – RECORD

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. MECHANICAL DIMENSION



UNIT: mm

	DIM.	TOL.
M1	11.8	MAX.
M2	3.554	MAX.
M3	10.67	±0.381
M4	0.7	MAX.
	CN0312QM-1R2KH	
M4	0.5	MAX.
	CN0312QM-3R2KH	
M5	4.826	±0.76

2. ELECTRICAL SPECIFICATION

Part number	Inductance (μ H) ±10% @100KHz/0.1V	DC Resistance ($m\Omega$) MAX.	SRF (MHz) TYP.	Irms (A) @40°C
CN0312QM-1R2KH	1.15	15.0	235	4.2
CN0312QM-3R2KH	3.25	49.0	150	3.1

※OPERATING TEMPERATURE RANGE:-25°C TO +125°C.

※STORAGE TEMPERATURE RANGE:-25°C TO +85°C.

※Irms: THE VALUE OF CURRENT CAUSES ΔT 40°C TEMPERATURE RISE.

TEST INSTRUMENT:

INDUCTANCE: AGILENT/HP16193 FIXTURE IN AGILENT/ 4291B

DCR: ZENTECH 502A

SRF: AGILENT 8753E

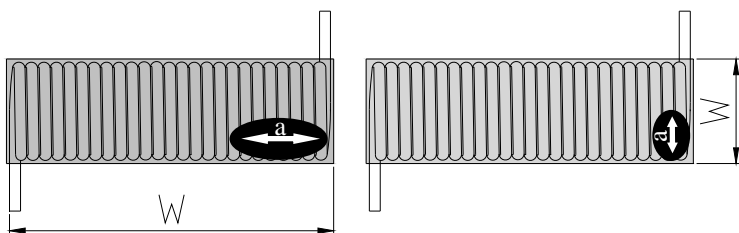
3. MATERIAL LIST

WIRE: POLYESTER ENAMELED COPPER WIRE.

CORE: FERRITE Ni-Zn CORE.

EPOXY: UV COATING.

4. UV VOID APPEARANCE TOLERANCE LIMIT

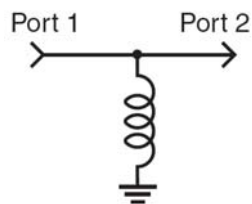
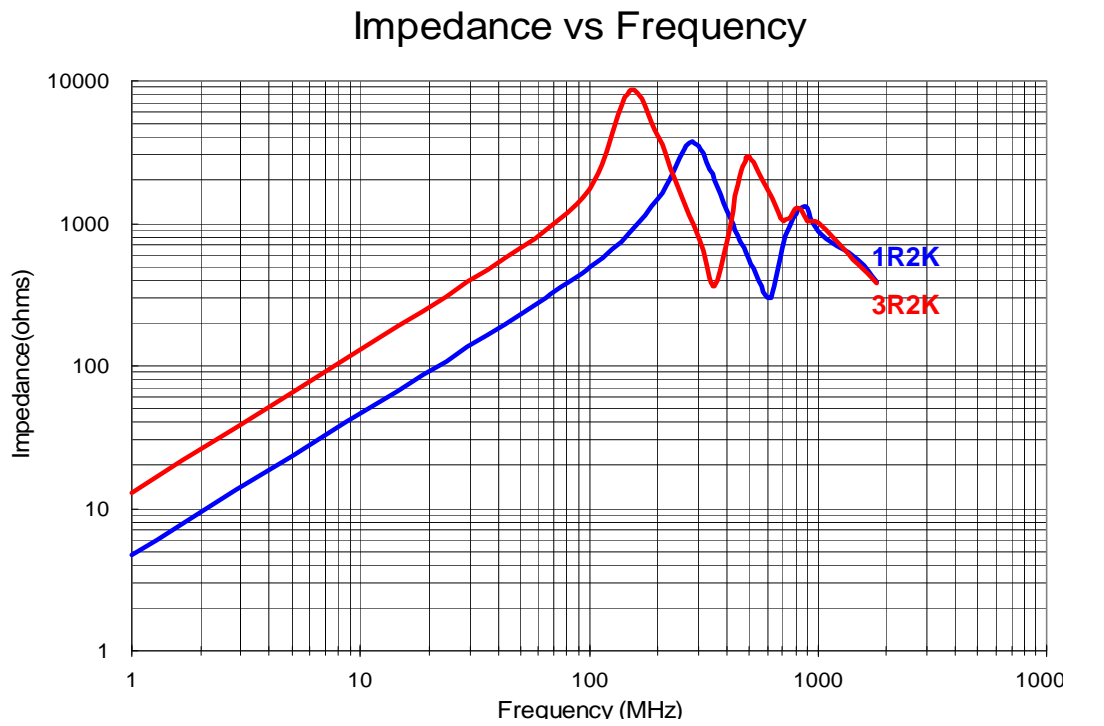


$a \leq W/3$ Good

$a \geq W/3$ NG

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5. ELECTRICAL CURVE



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6. RELIABILITY PERFORMANCE

Reliability Experiment For Electrical

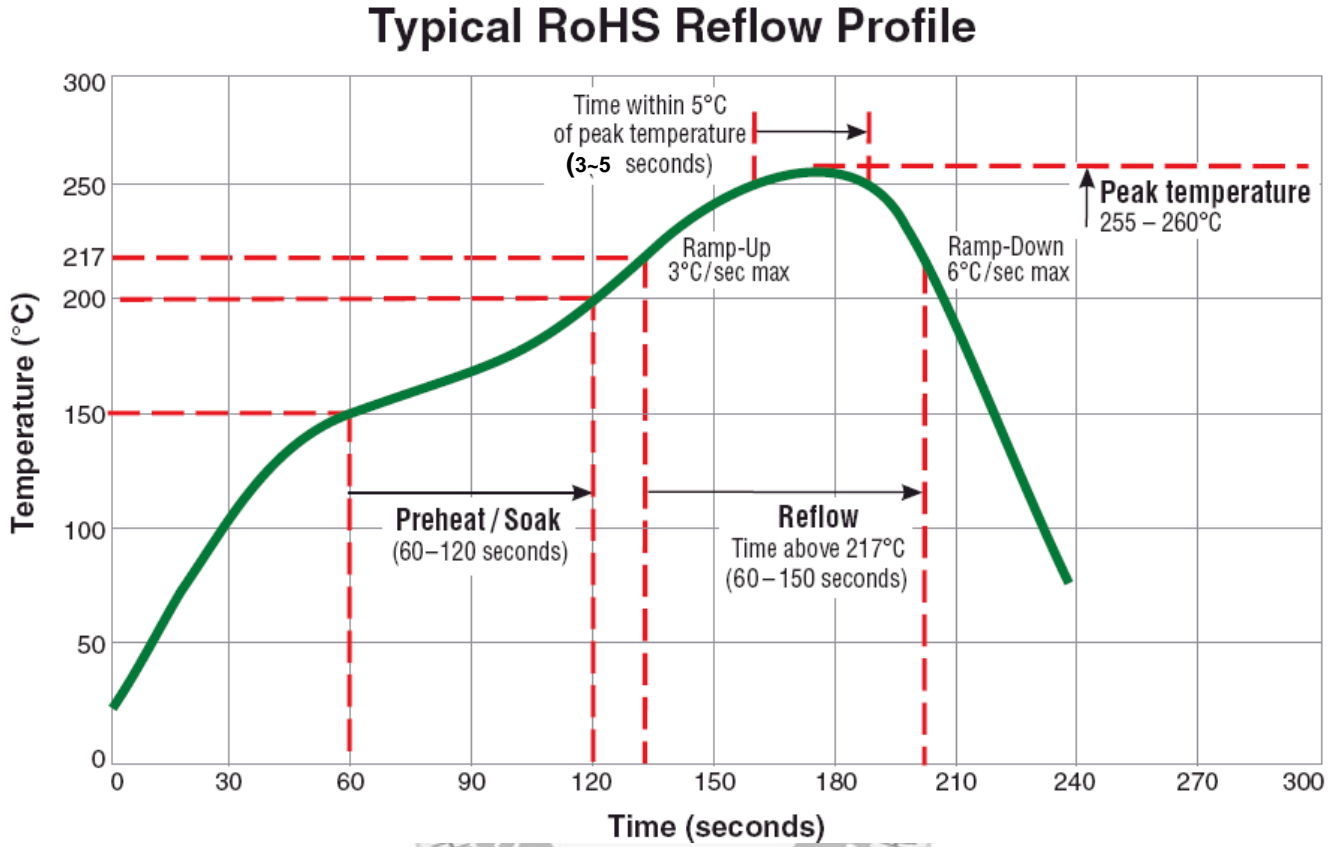
Test Item	Accept criteria	Test Condition	Standard Source
Humidity Test	1.Change from an initial value L:within±5% 2.no visible damage.	+40°C± 2°C, humidity of 90% ±5% (total 96 hours).	MIL-STD-202G Method 103B Test Condition B
High Temperature Test	1.Change from an initial value L:within±5% 2.no visible damage.	1.Temperature: +125°C±2°C. 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°C±2°C. 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°C±5°C (30 minutes) ~ -55±5°C (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°C±5°C (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°C ~260°C for 3~5 Sec. in air, Through 2 Cycle. Temperature Ramp:+1~4°C/sec.; Above 217°C, 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°C solder pot of 3~5 Sec.	Reference J-STD-002D

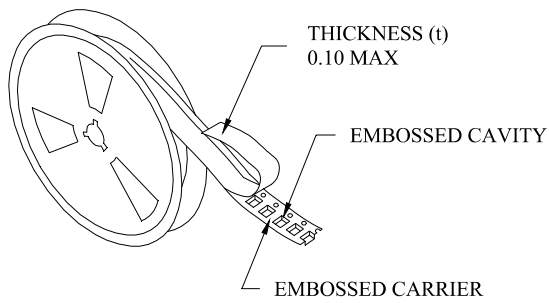
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7. TYPICAL RoHS REFLOW PROFILE

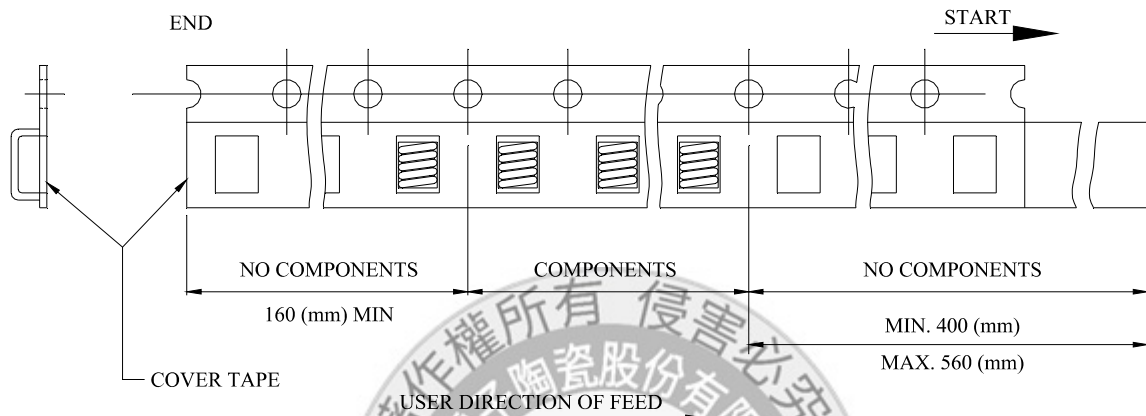
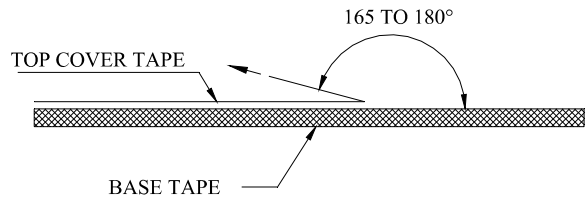


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8. PACKING

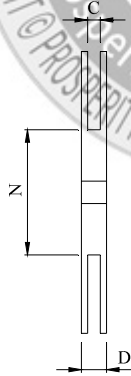
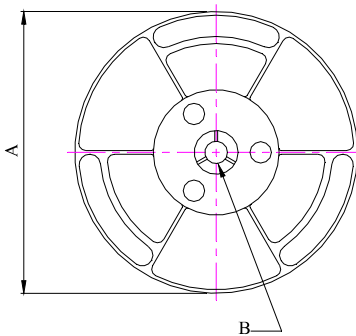


- THE FORCE FOR TEARING OFF COVER TAPE IS 10 TO 130 GRAMS IN THE ARROW DIRECTION.

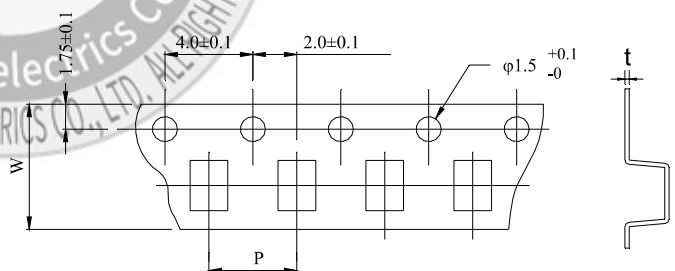


■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



■ DIMENSIONS OF CARRIER TAPE (mm)

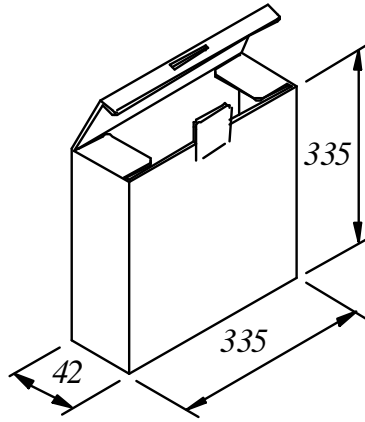


UNIT: mm

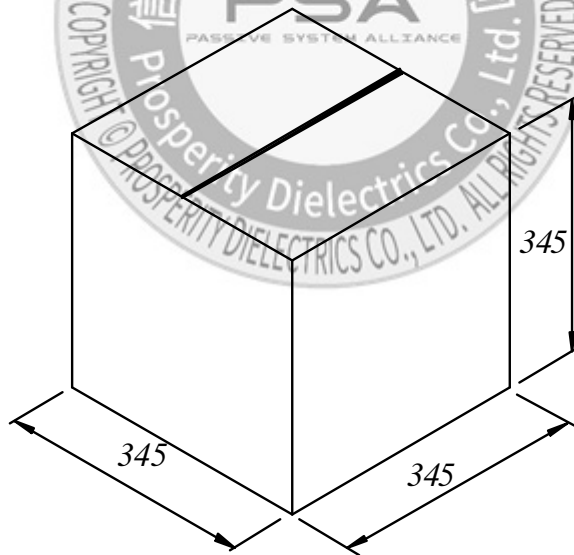
ITEM	A	B	C	D	N	P	W	t
DIM.	330	13.0	24.5	30.4	100	12.0	24.0	0.3
TOL.	MAX.	±0.2	±0.2	MAX.	±0.5	±0.1	±0.3	±0.05

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UNIT : mm



- CONSTRUCTION:
THE CASE CONTAINS 1-24mm WIDE CARRIER TAPES.
Q'TY: 1,500 / REEL



TOTAL Q'TY : 12,000 PCS