

SPECIFICATION FOR APPROVAL

CUSTOMER	_____
CUST. PART NO.	_____
CUST. DOC. REV.	_____
DESCRIPTION	SMD POWER CHOKE(RoHS+H.F.)
SAMPLE LOT NO.	_____
PART NO.	CSN054D-XXXX-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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CUSTOMER	CUSTOMER P/N	REV. -	SPL. LOT NO.	
PART NAME SMD POWER CHOKE (RoHS+H.F.)	PART NO. CSN054D-XXXX-LRH	REV. ORIG	DATE OF ISSUE	Q'TY 0 PCS

ENGINEERING CHANGE NOTICE – RECORD

REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
ORIG		<i>Tieqiao Gong</i>		

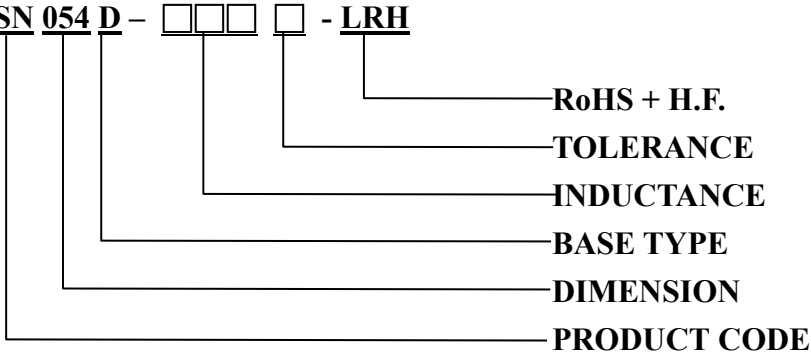


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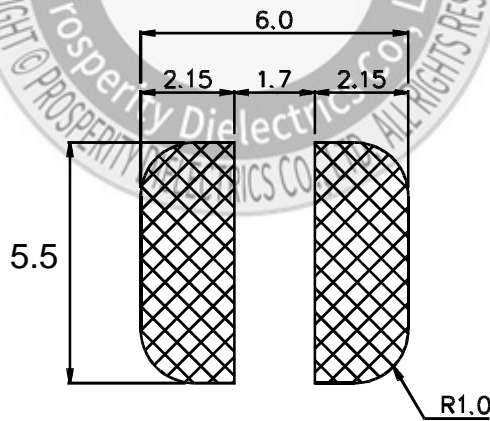
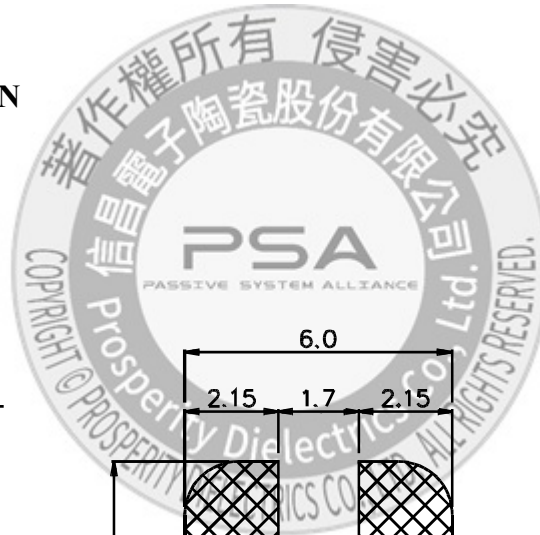
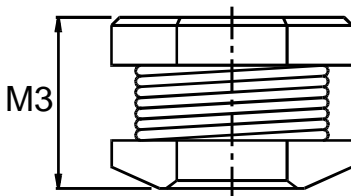
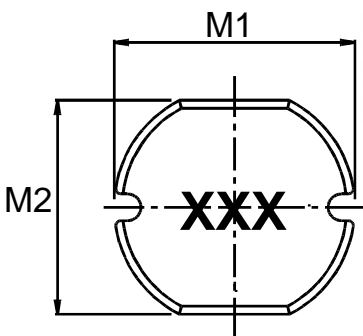
※This is a RoHS and REACH compliant product whose related documents are available on request.
 ※Graphic is only for dimensionally application.

1. PART NUMBER IDENTIFICATION

CSN 054 D - □□□ □ - LRH



2. MECHANICAL DIMENSION



Recommended Patterns

UNIT: mm

	DIM.	TOL.
M1	5.8	±0.3
M2	5.2	±0.3
M3	4.5	±0.35

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3. ELECTRICAL SPECIFICATION

Part number	Marking	Inductance (uH)	Test Frequency (KHz)	DC Resistance (Ω) MAX.	Rated Current (A)
CSN054D-1R0M-LRH	1R0	1.0	100	0.015	4.00
CSN054D-1R9M-LRH	1R9	1.9	100	0.039	3.00
CSN054D-2R2M-LRH	2R2	2.2	100	0.020	4.00
CSN054D-3R3M-LRH	3R3	3.3	100	0.021	3.00
CSN054D-4R7M-LRH	4R7	4.7	100	0.028	2.00
CSN054D-6R8M-LRH	6R8	6.8	100	0.042	2.00
CSN054D-100M-LRH	100	10	100	0.10	1.44
CSN054D-120M-LRH	120	12	100	0.12	1.40
CSN054D-150M-LRH	150	15	100	0.14	1.30
CSN054D-180M-LRH	180	18	100	0.15	1.23
CSN054D-220M-LRH	220	22	100	0.18	1.11
CSN054D-270M-LRH	270	27	100	0.20	0.97
CSN054D-330L-LRH	330	33	100	0.23	0.88
CSN054D-390L-LRH	390	39	100	0.32	0.80
CSN054D-470L-LRH	470	47	100	0.37	0.72
CSN054D-560K-LRH	560	56	100	0.42	0.68
CSN054D-680K-LRH	680	68	100	0.46	0.61
CSN054D-820K-LRH	820	82	100	0.60	0.58
CSN054D-101K-LRH	101	100	10	0.70	0.52
CSN054D-121K-LRH	121	120	10	0.93	0.48
CSN054D-151K-LRH	151	150	10	1.10	0.40
CSN054D-181K-LRH	181	180	10	1.38	0.38
CSN054D-221K-LRH	221	220	10	1.57	0.35
CSN054D-271K-LRH	271	270	10	1.85	0.30
CSN054D-331K-LRH	331	330	100	2.25	0.27

NOTE:

1. Tolerance: M:±20%, L:±15%, K:±10%
2. Operating temperature range: -25°C to +125°C.
3. Storage temperature range:-25°C to +85°C.
4. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302.
5. DCR measured using the 16502 milli-ohm meter.
6. Inductance drops no more than 10% of initial value at rated current, temperature rises $\Delta t < 40^{\circ}\text{C}$.
7. MSL: Level 1

4. MATERIAL LIST

ITEM	MATERIAL CATEGORY	MATERIAL TYPE	SGS NO.	UL NO.
a	WIRE	POLYURETHANE COATED COPPER WIRE. OR EQUIV.	CE/2019/B1280	E143312
b	CORE	FERRITE OR EQUIV.		
c	SOLDER	Pb FREE OR EQUIV.		

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5. 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

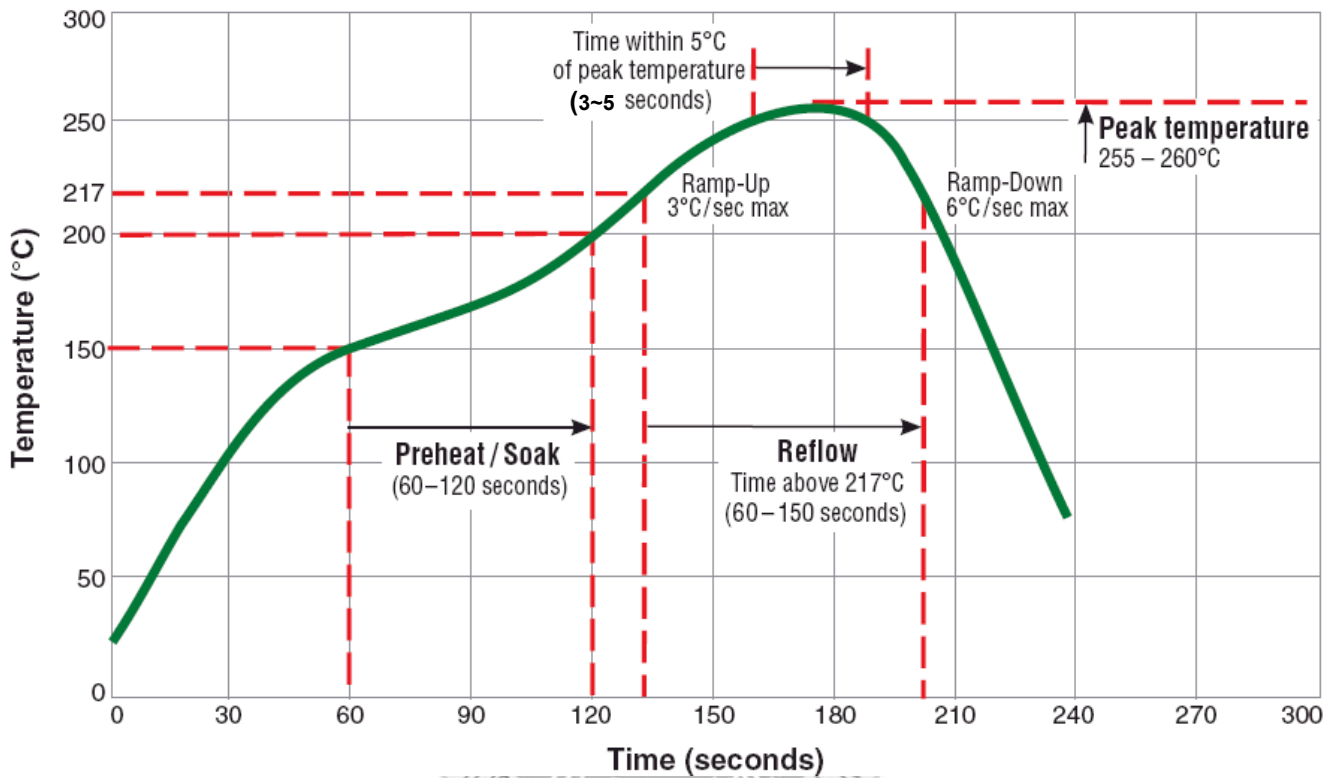
Reliability Experiment For Physical

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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6. TYPICAL RoHS REFLOW PROFILE

Typical RoHS Reflow Profile

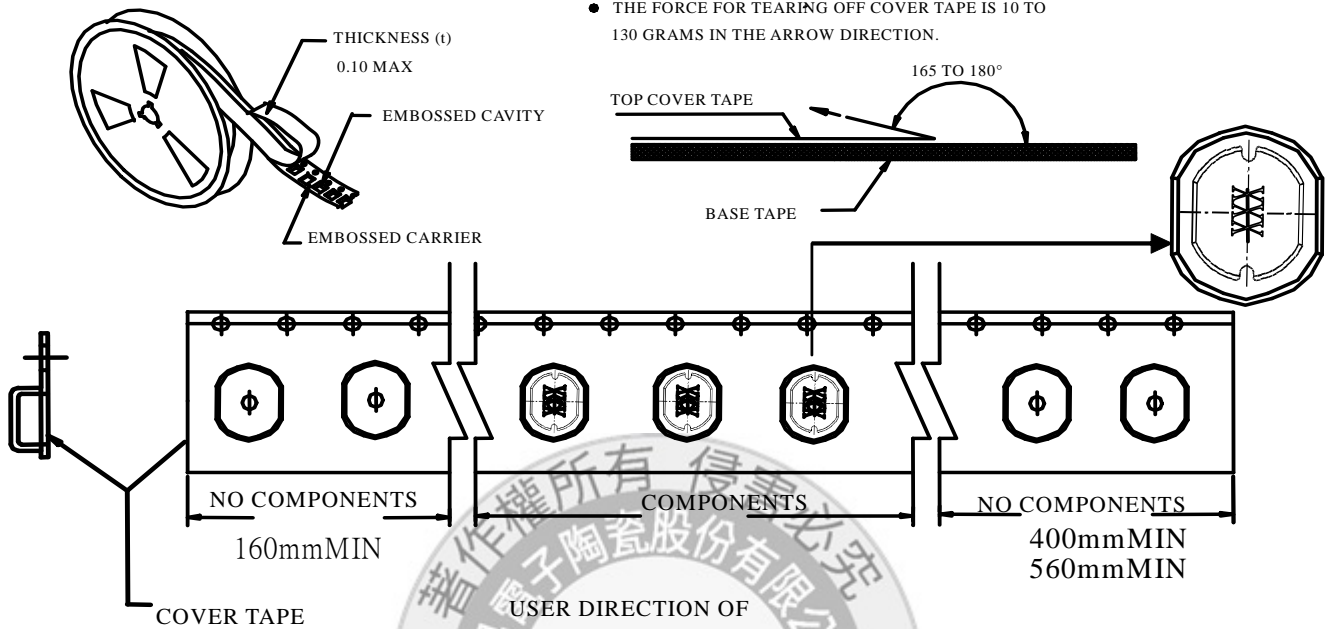


SPECIFICATION FOR APPROVAL

7. PACKING

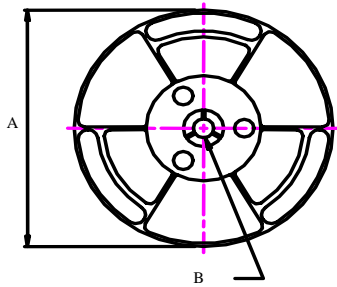
PACKAGING SPECIFICATION FOR SMD COILS

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

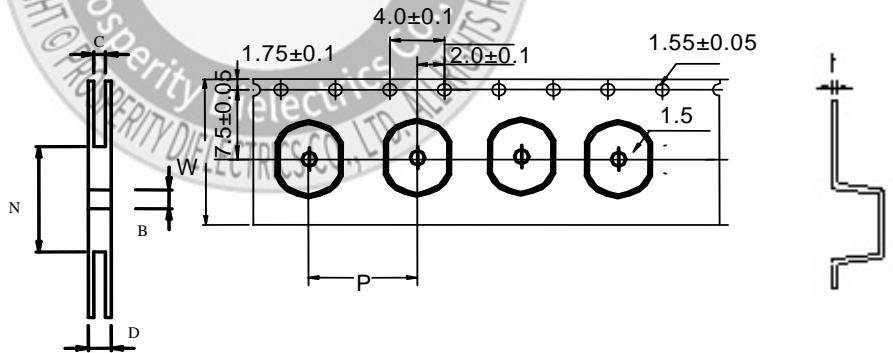


■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



■ DIMENSIONS OF CARRIER TAPE (mm)

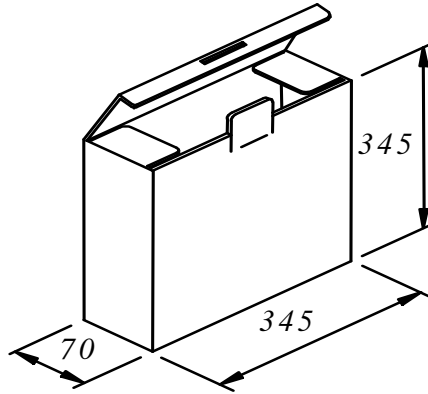


UNIT: mm

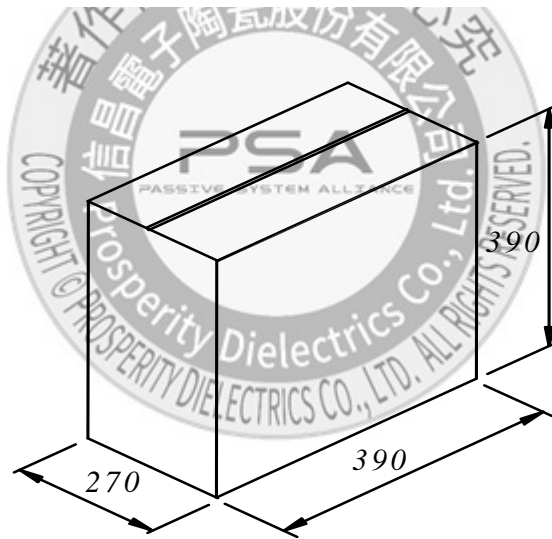
	A	B	C	N	P	D	W	t
DIM.	360	13.0	12.4	80	12	18.4	12.0	0.35
TOL.	MAX	+0.5-0.2	+2.0-0	MIN.	±0.1	MAX	±0.3	±0.05

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UNIT : mm



CONSTRUCTION:
THE CASE CONTAINS 2-12mm WIDE CARRIER TAPES
Q'TY: 1,000/REEL



TOTAL: Q'TY:6,000/PCS