



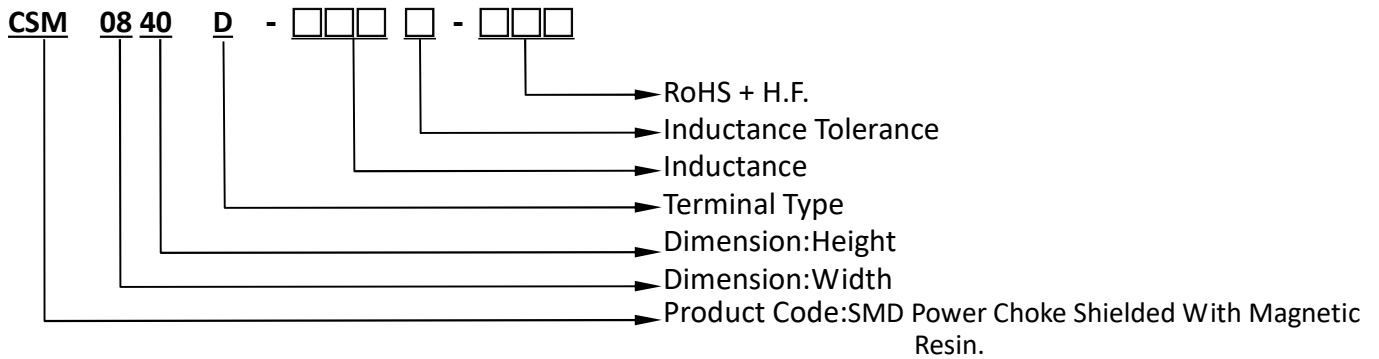
# PRODUCT SPECIFICATION

DOCUMENT NO. ENS000152180

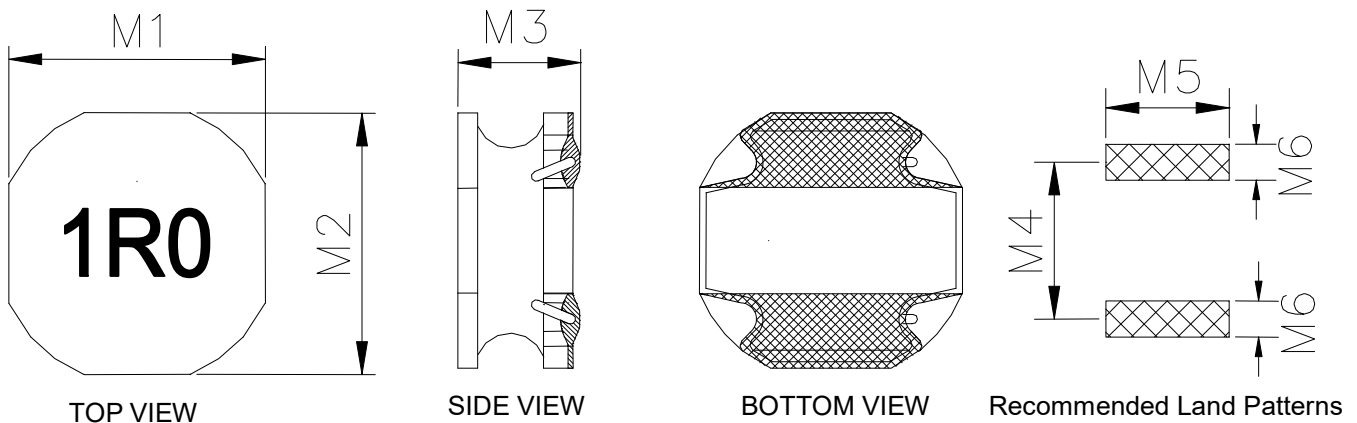
DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
CSM0840D-XXXX-LRH	Zhuoling Tang	Shengjun Zhou	Shengjun Zhou	Dick Wang

SCOPE: THIS SPECIFICATION APPLIES TO COATED RESIN CHOKE.

1.PART NUMBER IDENTIFICATION:

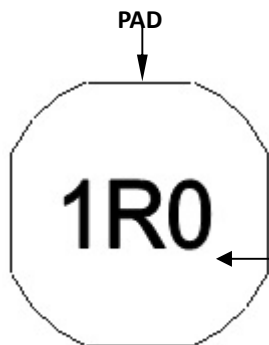


2.MECHANICAL DIMENSIONS: (Unit: mm)



ITEM	M1	M2	M3	M4	M5	M6
DIM.	8.0	8.0	4.2	5.6	7.5	2.2
TOL.	±0.2	±0.2	MAX.	-	-	-

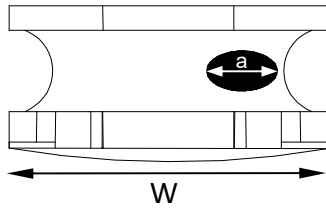
3.MARKING



Marking Direction: PAD is on the upper and lower sides with the font facing up and centered.

Example: 1R0 Stands for Marking → 1.0μH

※Void appearance tolerance limit:



$a \leq W/3$  Good  
 $a > W/3$  NG

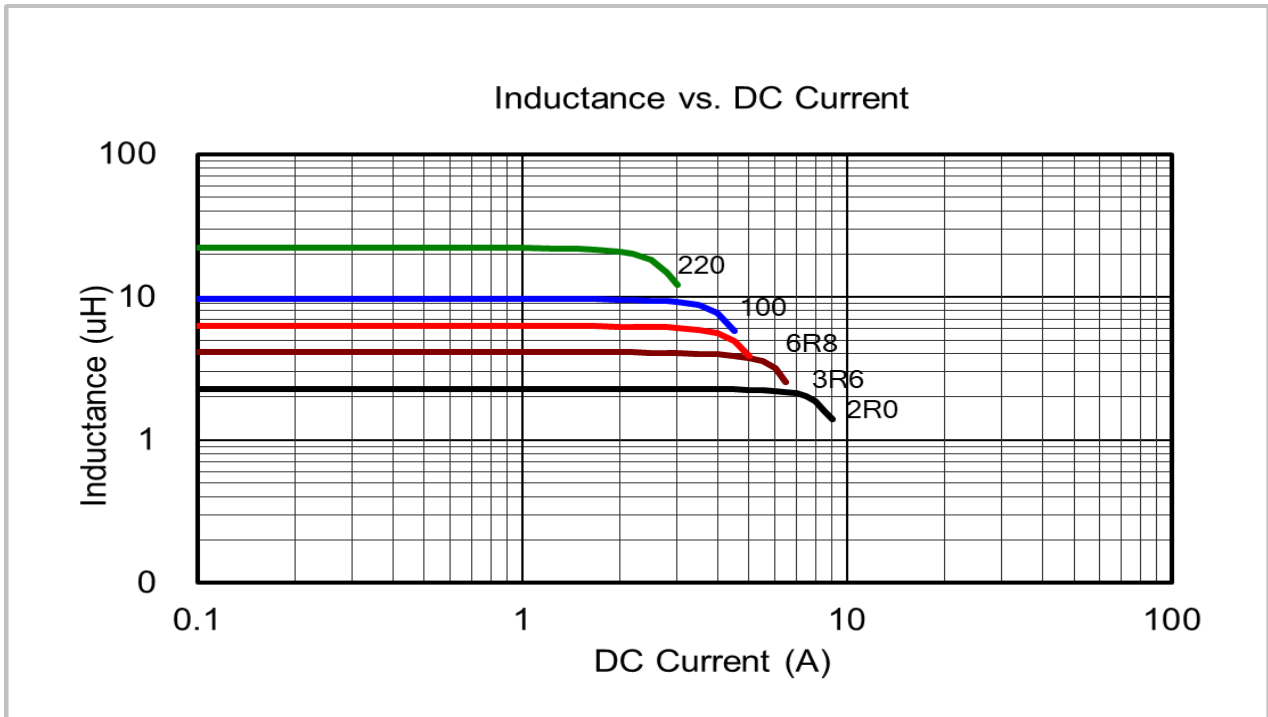
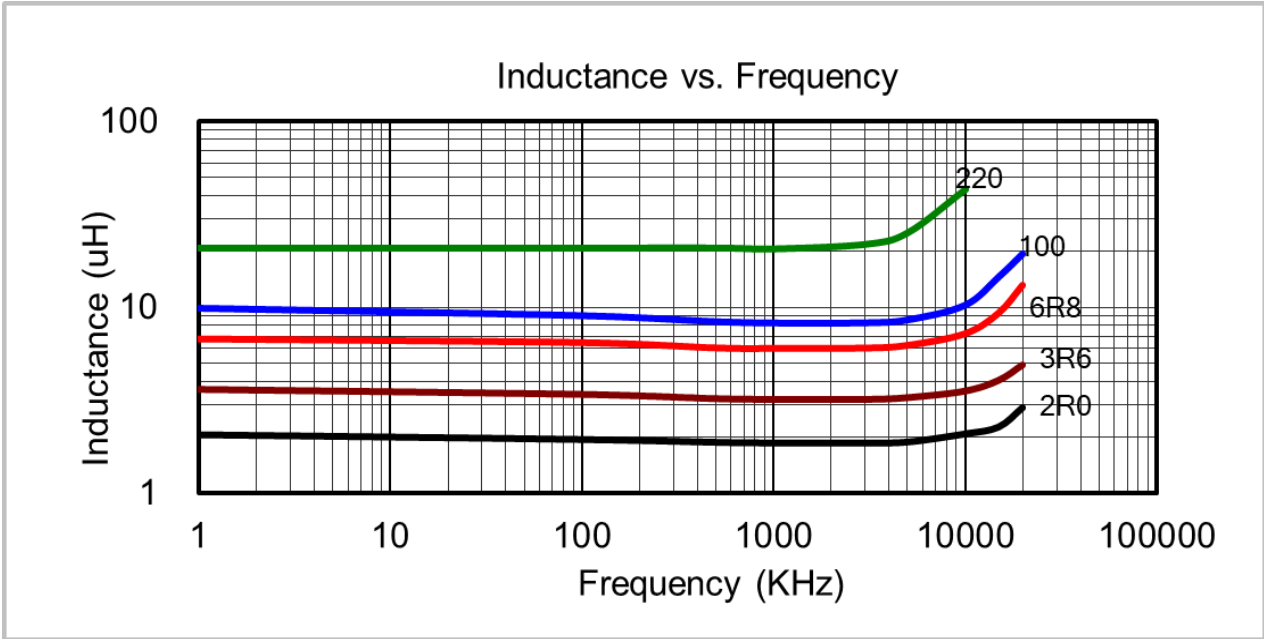
4.ELECTRICAL SPECIFICATIONS:

Part number	Mark	Inductance (μH)	Inductance Tolerance	DC Resistance (mΩ) Max.	Isat (A) Max.	Irms (A) Max.
CSM0840D-R90□-LRH	R90	0.90	N	8.50	12.00	8.00
CSM0840D-1R4□-LRH	1R4	1.40	N	11.00	10.80	7.80
CSM0840D-2R0□-LRH	2R0	2.00	M、N	13.20	9.00	7.40
CSM0840D-2R2□-LRH	2R2	2.20	M、N	15.60	7.50	6.00
CSM0840D-3R3□-LRH	3R3	3.30	M、N	19.50	7.00	5.10
CSM0840D-3R6□-LRH	3R6	3.60	M、N	19.50	6.00	4.90
CSM0840D-4R7□-LRH	4R7	4.70	M、N	23.40	5.50	4.60
CSM0840D-5R1□-LRH	5R1	5.10	M、N	24.70	4.70	4.05
CSM0840D-6R2□-LRH	6R2	6.20	M、N	27.30	4.45	3.85
CSM0840D-6R8□-LRH	6R8	6.80	M、N	31.20	5.00	4.40
CSM0840D-100□-LRH	100	10.00	M、N	45.00	4.00	3.80
CSM0840D-150□-LRH	150	15.00	M、N	61.10	3.00	2.80
CSM0840D-220□-LRH	220	22.00	M、N	85.80	2.80	2.60
CSM0840D-330□-LRH	330	33.00	M、N	120.00	2.00	1.80
CSM0840D-470□-LRH	470	47.00	M、N	176.80	1.90	1.75
CSM0840D-680□-LRH	680	68.00	M、N	246.00	1.70	1.45
CSM0840D-101□-LRH	101	100.00	M、N	377.00	1.10	1.10

NOTE:

- Tolerance: M=±20%,N=±30%
- Test Frequency:100KHz /1V.
- Test Equipment:  
 L:CHROMA-3302+1320. or equivalent.  
 SRF:HP-4291B or equivalent.  
 RDC:CH16502BC or equivalent.
- Isat: Based on inductance decrease 30% Max.(at 20°C)
- Irms: Based on temperature increase 40°C Max.(at 20°C)
- Operating temperature range:-25°C to +125°C (Including self-temperature rise)
- Storage temp.: -40°C to +85°C.
- MSL : LEVEL 1.

5. ELECTRICAL CURVE



6. MATERIAL LIST

ITEM	MATERIAL CATEGORY	MATERIAL TYPE	SGS NO.	UL NO.
a	WIRE	CLASS H SOLDERABLE POLYURETHANE ENAMELED COPPER WIRE. OR EQUIV.	ETR20B00969	E174837
b	CORE	FERRITE OR EQUIV.		
c	ADHESIVE	EPOXY RESIN OR EQUIV.		
d	SOLDER	Pb FREE OR EQUIV.		

7. RELIABILITY PERFORMANCE

Reliability Experiment For Electrical

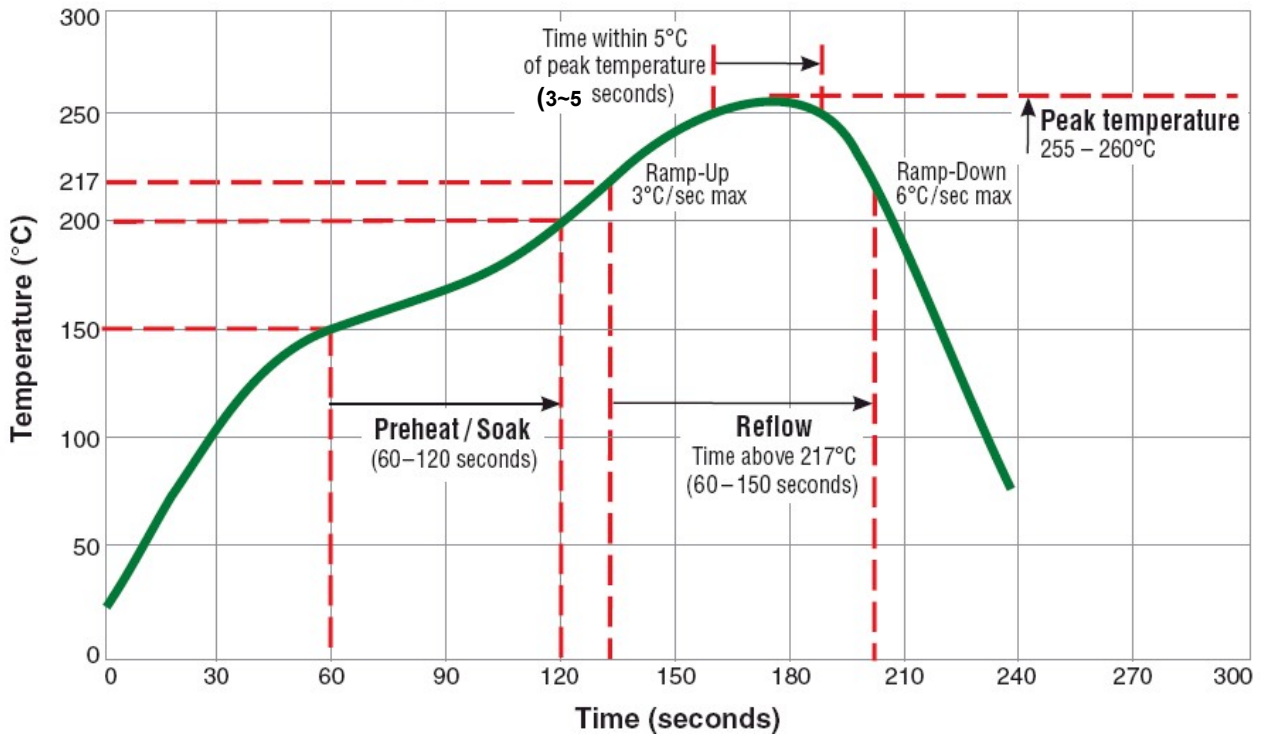
Test Item	Accept criteria	Test Condition	Standard Source
Humidity Test	1.Change from an initial value L:within±5% 2.no visible damage.	+40°C ± 2°C, humidity of 90% ±5% (total 96 hours).	MIL-STD-202H Method 103 Test Condition B
High Temperature Test	1.Change from an initial value L:within±5% 2.no visible damage.	1.Temperature: +125°C ±2°C. 2.Test time: 72±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: 72±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) ~ -65°C ±5°C (30 minutes), temperature switch time: 5 minutes (total 50 cycles).	Reference MIL-STD-202H Method 107 Test Condition B-2
Life Test	1.Change from an initial value L:within±5% 2.no visible damage.	+70°C ±5°C (250Hours).	Reference MIL-STD-202H Method 108 Test Condition B

Reliability Experiment For Physical

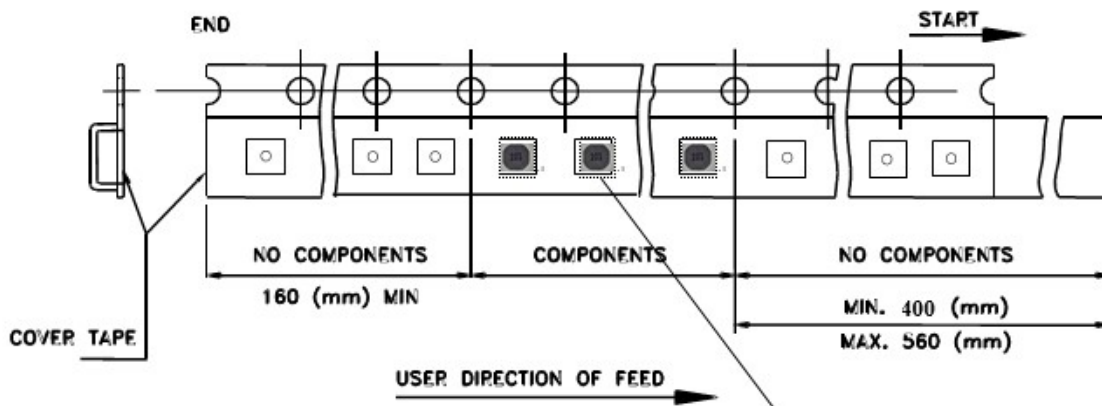
Test Item	Accept criteria	Test Condition	Standard Source
Vibration Test	1.Change from an initial value L:within±5% 2.no visible damage.	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202H Method 201
Solder Heat Resistance Test	1.no visible damage.	IR/convection reflow: Peak Temp 250±5°C for 30±5Sec. in air, Through 3 Cycle. Temperature Ramp:+1~4°C/sec.; Above 183°C, must keep 90 s - 120 s.	Reference MIL-STD-202H Method 210 Test Condition K (Reflow)
Solder Ability Test	1. Lead must have 95% above coverage.	Solder temp: 245±5°C, Immersion time: 5 second. Immersion rate: 25±6mm/sec.	J-STD-002D Test condition B1

8. REFLOW CHART

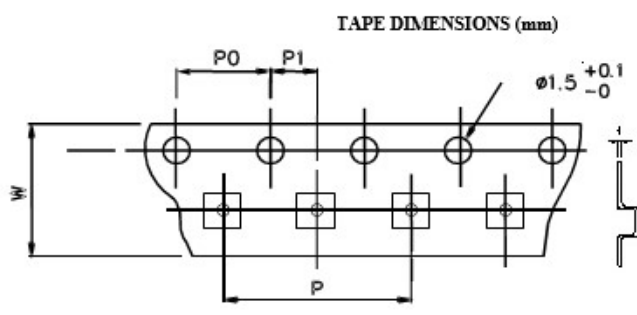
Typical RoHS Reflow Profile



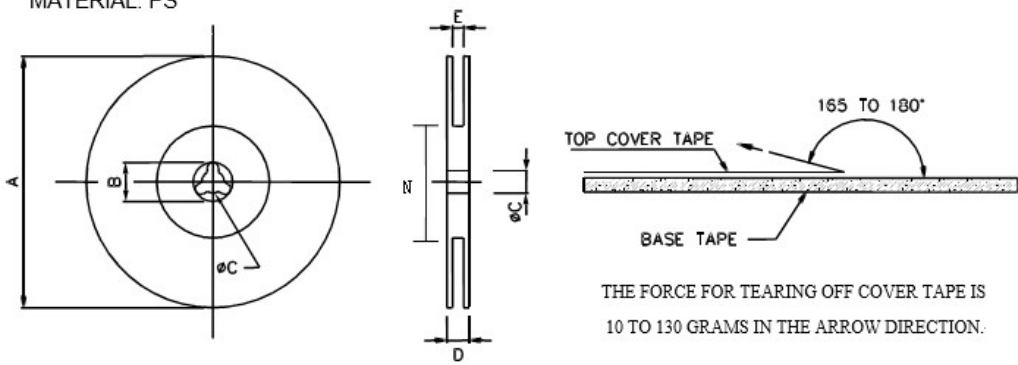
9.PACKING



Ex:



CARRIER TAPE REELS  
MATERIAL: PS



UNIT:mm

Product Series	A	B	C	D	E	N	T	P1	P	P0	W
DIM.	360	21.0	13.0	22.4	16.4	80	0.40	2.0	12.0	4.0	16.0
TOL.	MAX	± 0.8	+0.5-0.2	MAX	+2.0-0	MIN	±0.05	±0.10	±0.10	±0.10	±0.30

Reel		2Reel/box		3box/carton	
Q'ty (pcs)	Size (m/m)	Q'ty (pcs)	Size (m/m)	Q'ty (pcs)	Size (m/m)
1000	360φ	2000	335X335X52	6000	380X380X245