



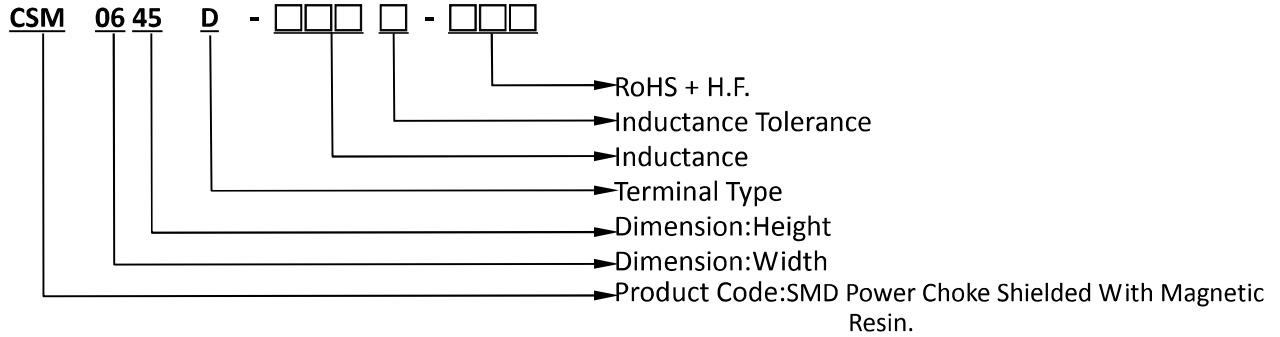
PRODUCT SPECIFICATION

DOCUMENT NO. ENS000152520

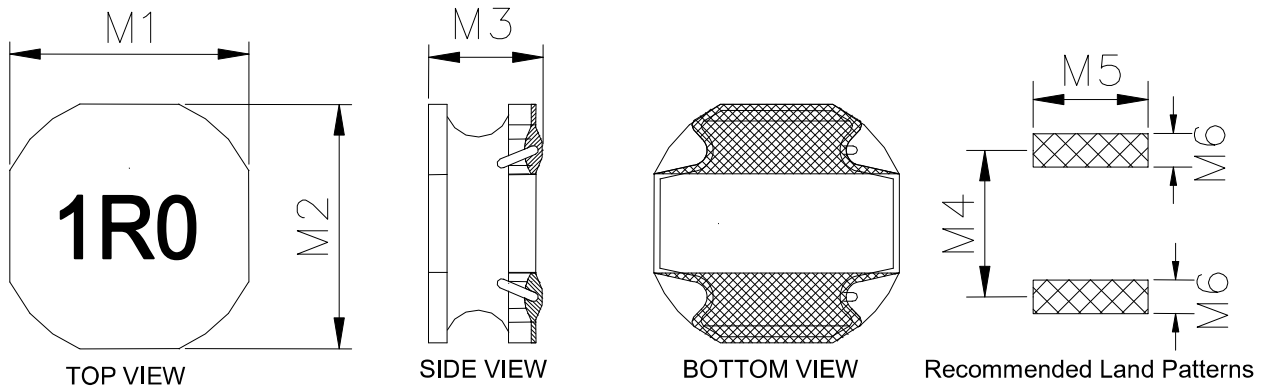
DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
CSM0645D-XXXX-LRH	Zhuoling Tang	Shengjun Zhou	Shengjun Zhou	Dick Wang

SCOPE: THIS SPECIFICATION APPLIES TO COATED RESIN CHOKE.

1.PART NUMBER IDENTIFICATION:

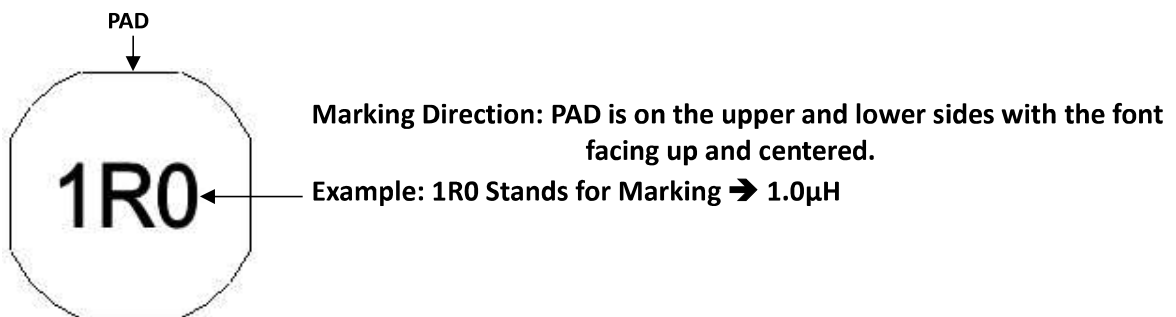


2.MECHANICAL DIMENSIONS: (Unit: mm)

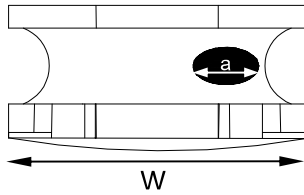


ITEM	M1	M2	M3	M4	M5	M6
DIM.	6.0	5.9	4.5	4.7	5.7	1.6
TOL.	±0.2	±0.2	MAX.	-	-	-

3.MARKING



※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) TYP.	Irms (A) TYP.
CSM0645D-1R0□-LRH	1R0	1.0	N	18.2	10.0	6.00
CSM0645D-1R3□-LRH	1R3	1.3	N	20.8	8.00	5.20
CSM0645D-1R8□-LRH	1R8	1.8	N	23.4	7.00	5.00
CSM0645D-2R2□-LRH	2R2	2.2	N	18.2	6.00	4.50
CSM0645D-2R3□-LRH	2R3	2.3	N	27.3	6.00	4.50
CSM0645D-3R0□-LRH	3R0	3.0	N	31.2	5.00	4.00
CSM0645D-3R3□-LRH	3R3	3.3	N、M	28.8	5.00	3.20
CSM0645D-1R5□-LRH	1R5	1.5	N、M	20.8	8.00	5.00
CSM0645D-4R5□-LRH	4R5	4.5	N、M	40.3	4.00	3.70
CSM0645D-4R7□-LRH	4R7	4.7	N、M	31.0	4.00	3.70
CSM0645D-6R3□-LRH	6R3	6.3	N、M	49.4	3.80	3.50
CSM0645D-6R8□-LRH	6R8	6.8	N、M	45.6	3.80	3.50
CSM0645D-100□-LRH	100	10	N、M	61.1	3.00	2.80
CSM0645D-150□-LRH	150	15	N、M	100.1	2.30	2.30
CSM0645D-220□-LRH	220	22	N、M	149.5	1.90	1.70
CSM0645D-330□-LRH	330	33	N、M	188.5	1.50	1.50
CSM0645D-470□-LRH	470	47	N、M	286	1.30	1.30
CSM0645D-680□-LRH	680	68	N、M	429	1.00	1.00
CSM0645D-820□-LRH	820	82	N、M	533.0	0.90	0.90
CSM0645D-101□-LRH	101	100	N、M	650	0.80	0.80
CSM0645D-151□-LRH	151	150	N、M	754.0	0.80	0.70

NOTE

□ Tolerance: M: ±20% N: ±30%

1. Test Frequency:100KHz, 1V

2. Test Equipment:

Inductance: CHROMA-3302+1320+16502 or equivalent.

SRF: HP-4291B or equivalent.

DC Resistance: CH16502BC or equivalent.

3. Isat: Based on inductance decrease 30% Max. (at 20°C)

4. Irms: Based on temperature increase 40°C Max. (at 20°C)

5. Operating temperature range: -25°C to +120°C (Including self-temperature rise)

6. Storage temp.: -40°C to +85°C

7. MSL: Level 1

5. RELIABILITY PERFORMANCE

Reliability Experiment For Electrical

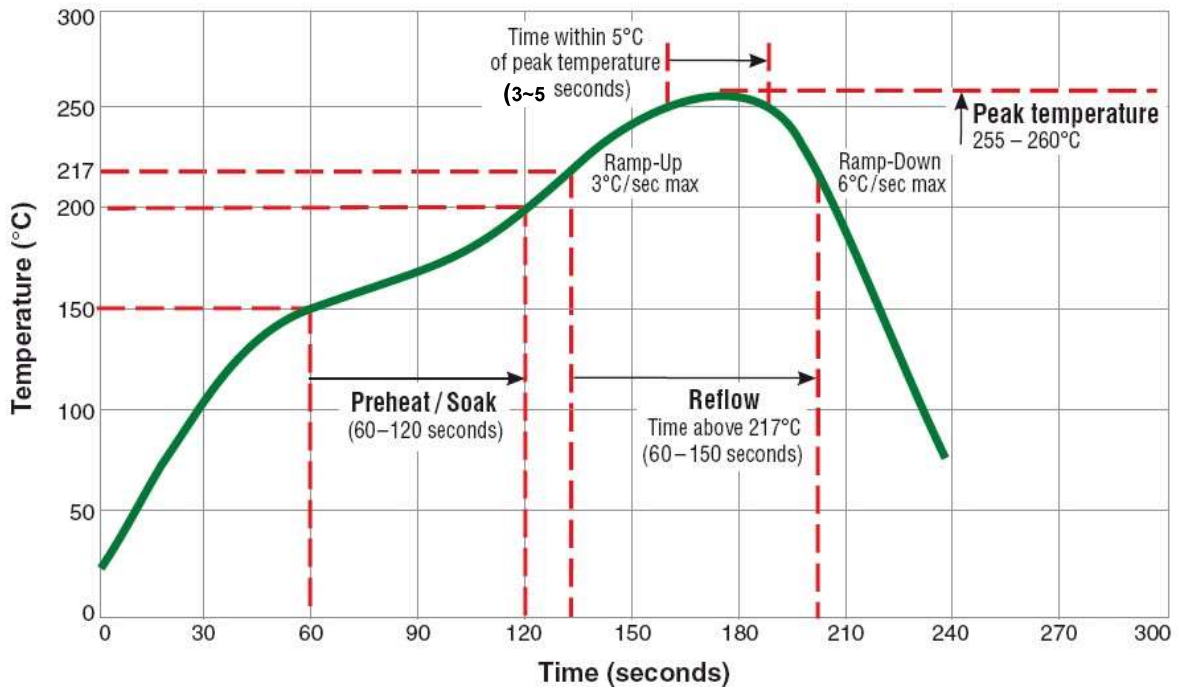
Test Item	Accept criteria	Test Condition	Standard Source
Humidity Test	1.Change from an initial value L:within±5% 2.no visible damage.	+40°C± 2°C, humidity of 90% ±5% (total 96 hours).	MIL-STD-202H Method 103 Test Condition B
High Temperature Test	1.Change from an initial value L:within±5% 2.no visible 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±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

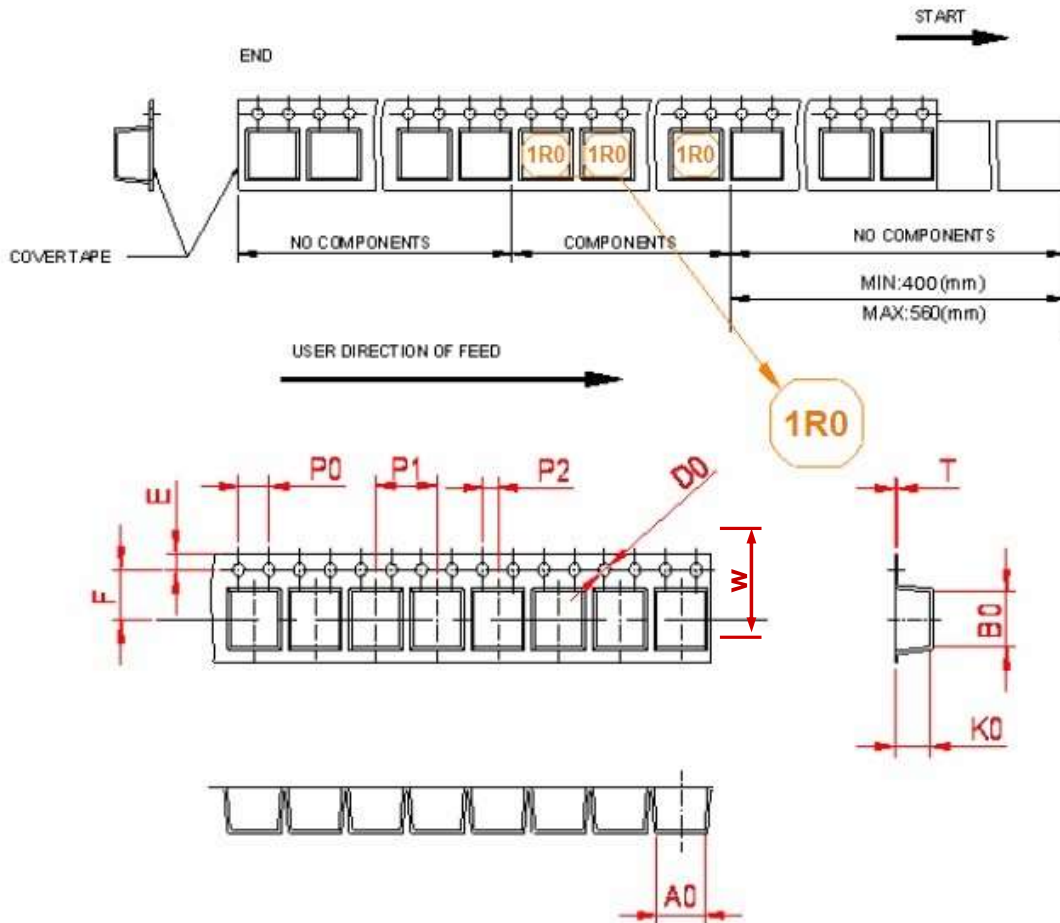
Test Item	Accept criteria	Test Condition	Standard Source
Vibration Test	1.Change from an initial value L:within±5% 2.no visible damage.	10-55-10HZ, amplitude: 1.5mm, direction: X, Y, Z axes, each axis 2 hours (total 6 hours).	MIL-STD-202H Method 201
Solder Heat Resistance Test	1.no visible damage.	IR/convection 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

6. REFLOW CHART

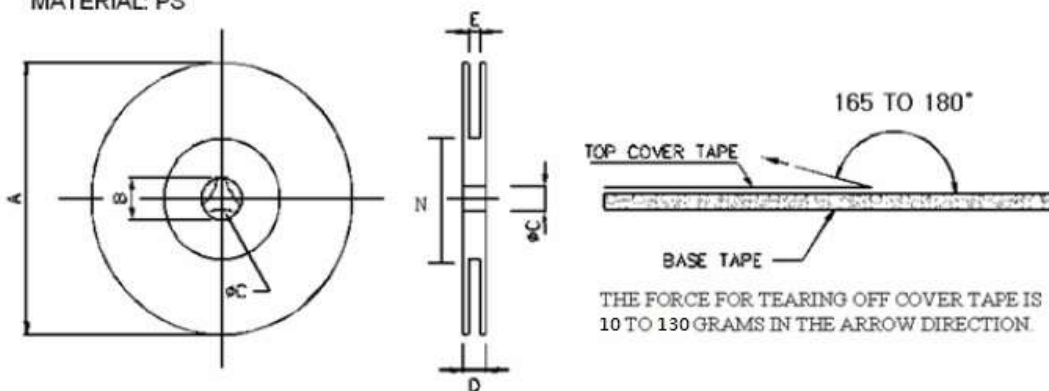
Typical RoHS Reflow Profile



7.PACKING



CARRIER TAPE REELS
MATERIAL: PS



UNIT :mm

Product Series	W	E	F	D0	P0	P1	P2	T	A0	B0	K0
DIM.	12	1.75	5.5	1.5	4	8	2	0.4	6.25	6.1	4.65
TOL.	±0.30	± 0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.10

Product Series	A	B	C	D	E	N
DIM.	330	21.5	13.0	17.5	13.5	100
TOL.	±0.3	± 0.8	±0.5	±2.0	±1.0	±1.5

Reel	2Reel/box	3box/carton
Q'ty (pcs)	Q'ty (pcs)	Q'ty (pcs)
1500	3000	9000