PRODUCT SPECIFICATION

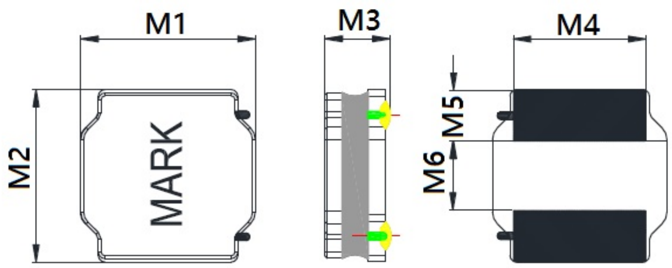
DOCUMENT NO. ENS000153060				
DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
CSME0520D-XXXX-LRH	Zhuoling Tang	Shengjun Zhou	Shengjun Zhou	Dick Wang

1. PART NUMBER IDENTIFICATION

CSME 0520 D - □□□ □ - LRH

- LRH — RoHS + H.F.
- □ — TOLERANCE
- □□□ — INDUCTANCE
- D — TERMINAL TYPE
- 0520 — DIMENSION
- CSME — PRODUCT CODE

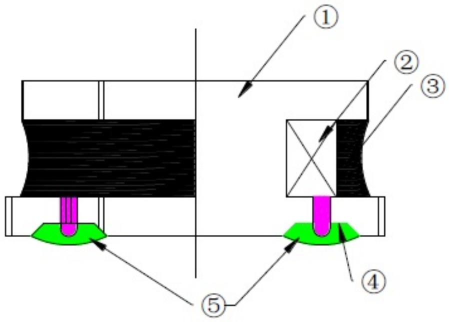
2. MECHANICAL DIMENSION



UNIT : mm

	DIM.	TOL.
M1	5.0	±0.2
M2	5.0	±0.2
M3	2.2	MAX.
M4	4.0	±0.3
M5	1.45	±0.3
M6	2.1	REF.

3. STRUCTURE



4. MATERIAL LIST

NO	PARTS	MATERIAL
1	DRUM CORE	Ni-Zn FERRITE CORE
2	WIRE	POLYURETHANE ENAMELED COPPER WIRE
3	ADHESIVE	EPOXY RESIN MAGNETIC POWDER
4	PLATING ELECTRODES	PLATING: Ag 10-20 um Ni 1-3 um Sn 3-7 um
5	OUTER ELECTRODES	TOP SURFACE SOLDER COATING Sn99%、Ag0.3%、Cu0.7%

5. ELECTRICAL SPECIFICATION

Part number	Mark	Inductance (uH)	Inductance Tolerance	DC Resistance (mΩ) ±20%	Isat (A) MAX.	Irms (A) MAX.
CSME0520D-R47□-LRH	R47	0.47	N	15	4.85	3.95
CSME0520D-1R0□-LRH	1R0	1.0	N	21	4.00	3.60
CSME0520D-1R5□-LRH	1R5	1.5	N	26	3.35	3.20
CSME0520D-2R2□-LRH	2R2	2.2	N	35	2.90	2.90
CSME0520D-3R3□-LRH	3R3	3.3	N	48	2.40	2.40
CSME0520D-4R7□-LRH	4R7	4.7	M	60	2.00	2.00
CSME0520D-6R8□-LRH	6R8	6.8	M	90	1.60	1.65
CSME0520D-100□-LRH	100	10	M	120	1.30	1.45
CSME0520D-150□-LRH	150	15	M	165	1.10	1.20
CSME0520D-220□-LRH	220	22	M	260	0.90	1.00
CSME0520D-680□-LRH	680	68	M	850	0.70	0.53

□TOLERANCE：M:±20%、N:±30%

※ INDUCTANCE：@100KHz,0.25V

※ TEST MACHINE：HIOKI3532-50 OR EQUIVALENT

※ DC RESISTANCE：HIOKI 3540 OR EQUIVALENT

※ ISAT / IRISE：HP4284+42841A OR EQUIVALENT

※ OPERATING TEMPERATURE： -40℃ ~+125℃.

※ INDUCTANCE DROPS NO MORE THAN 30% OF INITIAL VALUE AT ISAT.

※ TEMPERATURE RISES：△t< 40℃ AT IRMS.

※ MSL：LEVEL 1.

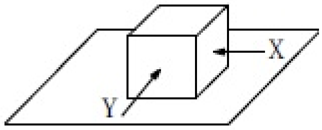
6. RELIABILITY PERFORMANCE

6-1.Storage Temperature range：-40℃～ ＋125℃

6-2.Operating temperature range：-40℃ ～ ＋125℃ (Including coil's self temperature rise)

6-3.External appearance：No external defects can be found in the visual inspection.

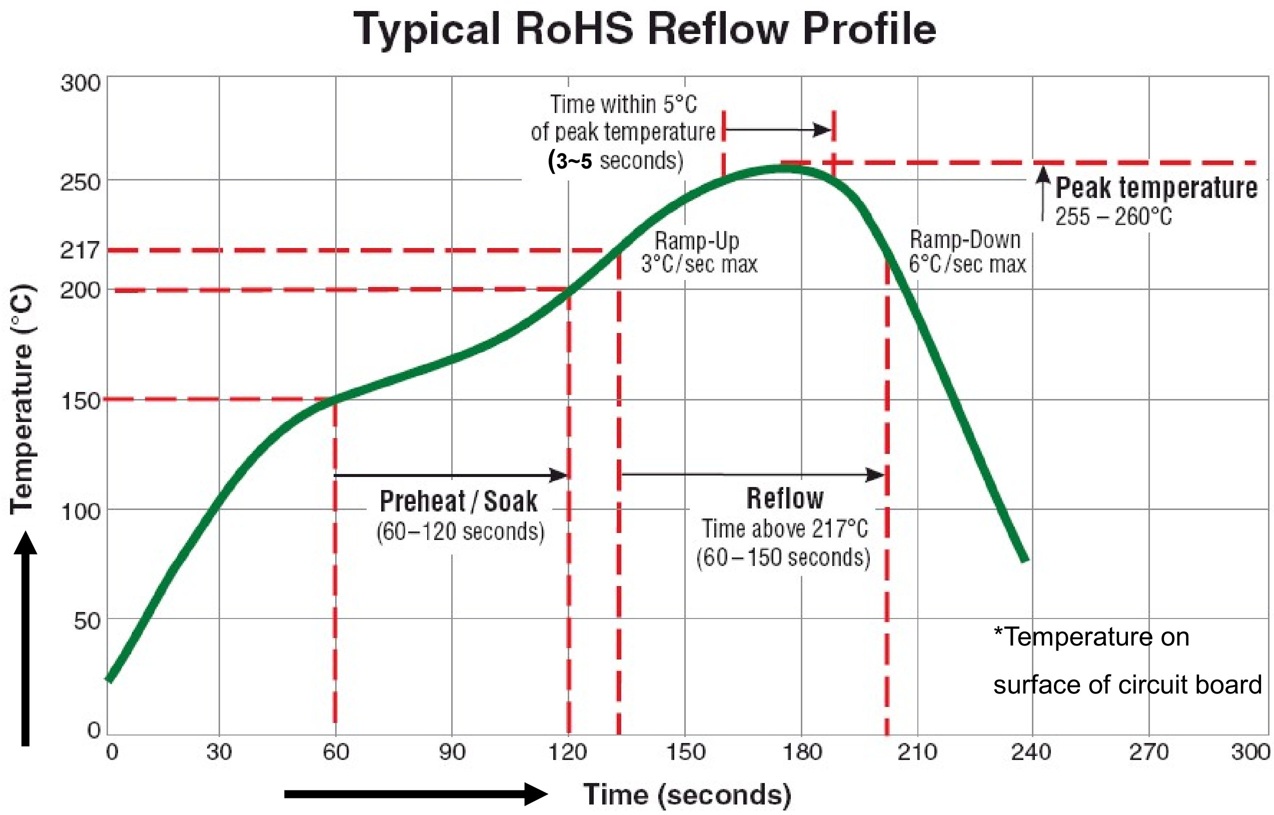
6-4.Electrode strength：No electrode detachment should be found when the device is pushed in two directions of X and Y with the force of 10.0N for 60±2 seconds after soldering between copper plate and the electrodes. (Refer to figure at right)



6-5.Vibration test：Inductance deviation is within ±10.0% after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down,right and left. The frequency is 10～55～10Hz and the amplitude of 1 minute cycle is 1.5mm PP.

6-6.Humidity test：Inductance deviation is within ±5.0% after 96±4 hours test under the condition of relative humidity of 90～95% and temperature of 60±2℃,and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

7. REFLOW CHART



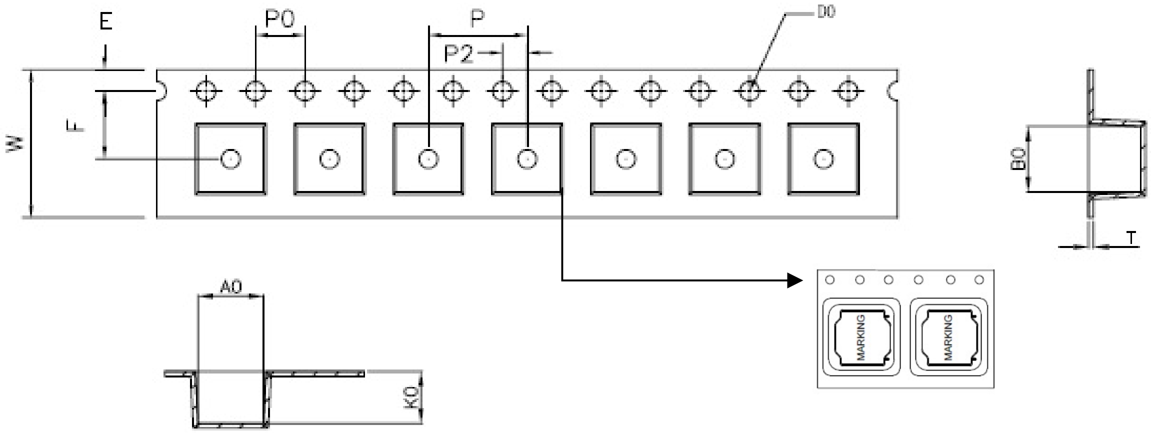
The products may be exposed to reflow soldering process of above profile up to two times.

8. PACKING

8-1 OUTER PACKING

3 KPCS/REEL;9 KPCS/INNER BOX;27 KPCS/OUTER BOX

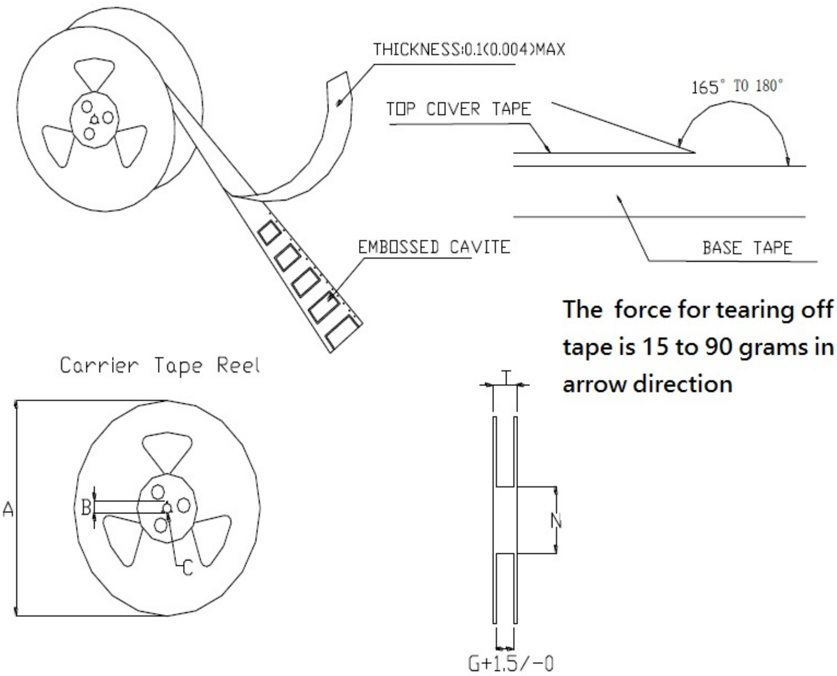
8-2 CARRIER TAPE DIMENSIONS



UNIT : mm

ITEM	W	A0	B0	K0	P	F	E	D0	P0	P2	T
DIM	12.0	5.4	5.4	2.3	8.00	5.50	1.75	1.50	4.00	2.00	0.35
TOLE	±0.3	±0.1	±0.1	±0.1	±0.1	±0.15	±0.1	+0.1	±0.1	±0.1	±0.05

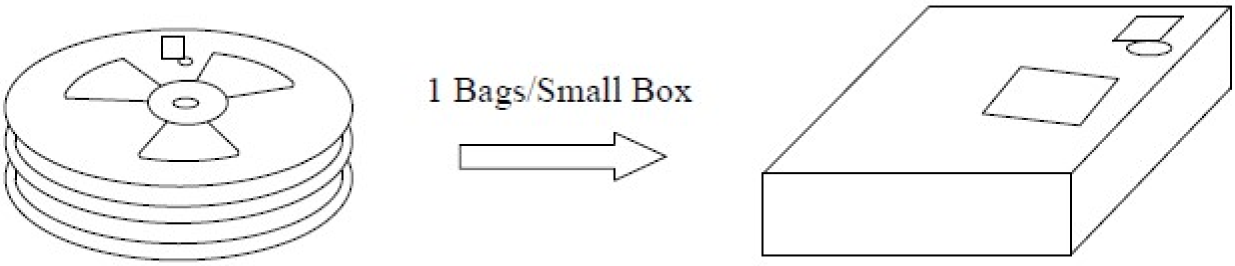
8-3 CARRIER REEL DIMENSIONS

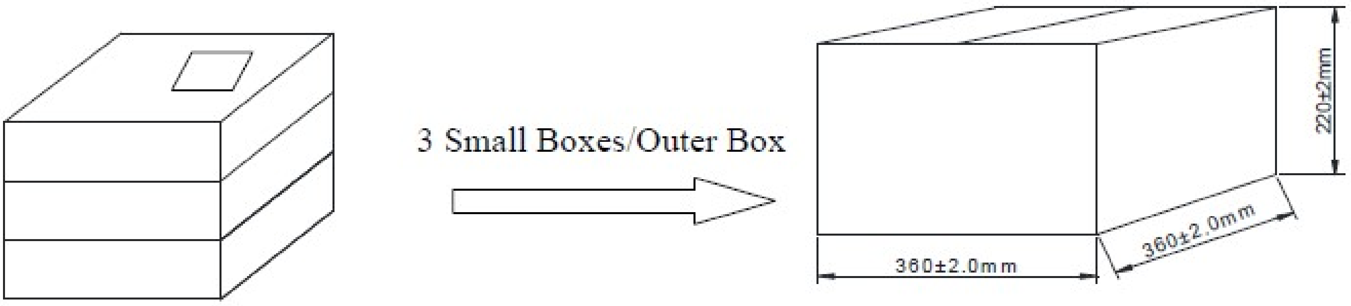


The force for tearing off cover tape is 15 to 90 grams in the arrow direction

UNIT : mm

Type	A	B	C	G	N	T
12mm	330	21±0.8	13±0.4	12.4	100	16.4





INNER BOX SIZE: 350*340*60mm
OUTER BOX SIZE: 360*360*220mm