

SPECIFICATION FOR APPROVAL

CUSTOMER	_____
CUST. PART NO.	_____
CUST. DOC. REV.	_____
DESCRIPTION	<u>POWER CHOKE(RoHS+H.F.)</u>
SAMPLE LOT NO.	_____
PART NO.	<u>CSME0520D-XXXX-LRH</u>
DOC. REV.	<u>ORIG</u>
DATE	<u>8/23/'17</u>

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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TESTED BY	CHECKED BY	APPROVED BY
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SPECIFICATION FOR APPROVAL

CUSTOMER	CUSTOMER P/N	REV. -	SPL. LOT NO.	
PART NAME POWER CHOKE (RoHS+H.F.)	PART NO. CSME0520D-XXXX-LRH	REV. ORIG	DATE OF ISSUE	Q'TY 0 PCS

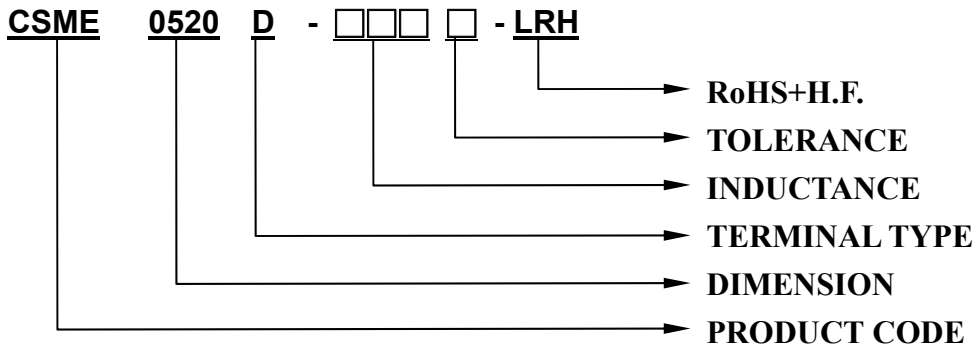
ENGINEERING CHANGE NOTICE - RECORD

REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
ORIG		<i>Zhikai Deng</i>	<i>8/23/'17</i>	

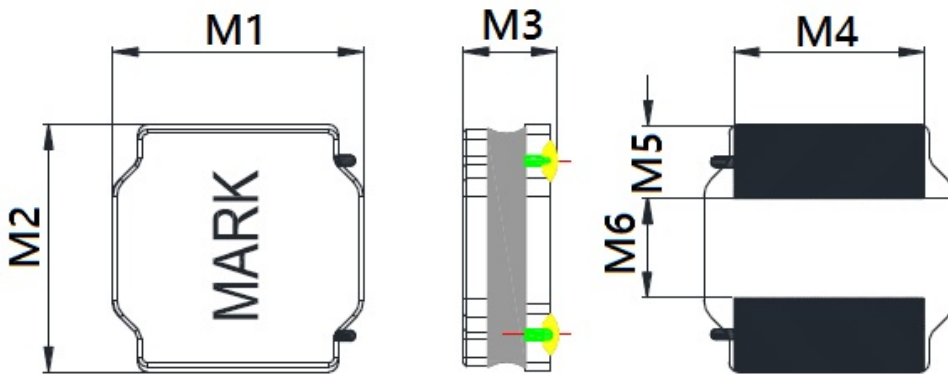
SPECIFICATION FOR APPROVAL

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

1. PART NUMBER IDENTIFICATION



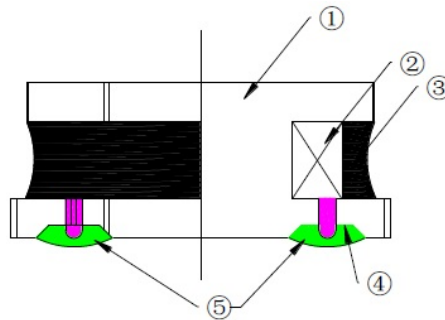
2. MECHANICAL DIMENSION



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 CHARACTERISTICS

Part Number.	Mark	Inductance (uH)	DCR (mΩ) ±20%	Isat (A) MAX.	Irise (A) MAX.
CSME0520D-1R0N-LRH	1R0	1.0	21	4.00	3.60
CSME0520D-1R5N-LRH	1R5	1.5	26	3.35	3.20
CSME0520D-2R2N-LRH	2R2	2.2	35	2.90	2.90
CSME0520D-3R3N-LRH	3R3	3.3	48	2.40	2.40
CSME0520D-4R7M-LRH	4R7	4.7	60	2.00	2.00
CSME0520D-6R8M-LRH	6R8	6.8	90	1.60	1.65
CSME0520D-100M-LRH	100	10	120	1.30	1.45
CSME0520D-150M-LRH	150	15	165	1.10	1.20
CSME0520D-220M-LRH	220	22	260	0.90	1.00
CSME0520D-680M-LRH	680	68	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°C ~ +125°C.

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

※ TEMPERATURE RISES : Δ t < 40°C AT IRMS.

※ MSL : LEVEL 1.

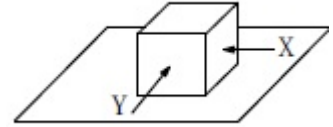
6. RELIABILITY PERFORMANCE

6-1.Storage Temperature range : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

6-2.Operating temperature range : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including coil's self temperature rise)

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

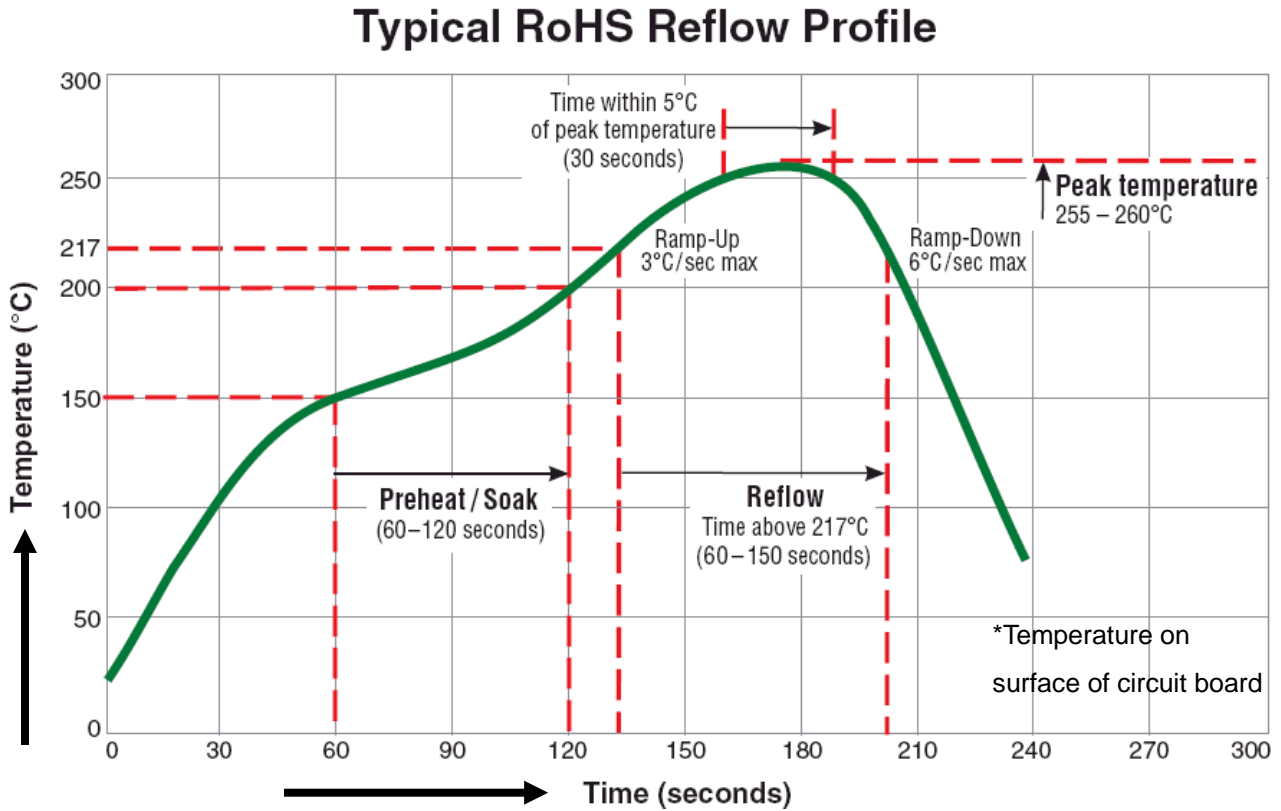
6-4.Electrode strength : No electrode detachment should be found when the device is pushed in two directions of X and Y with the force of 10.0N for 60 ± 2 seconds after soldering between copper plate and the electrodes. (Refer to figure at right)



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

6-6.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of $90 \sim 95\%$ and temperature of $60 \pm 2^{\circ}\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

7. TYPICAL RoHS REFLOW PROFILE



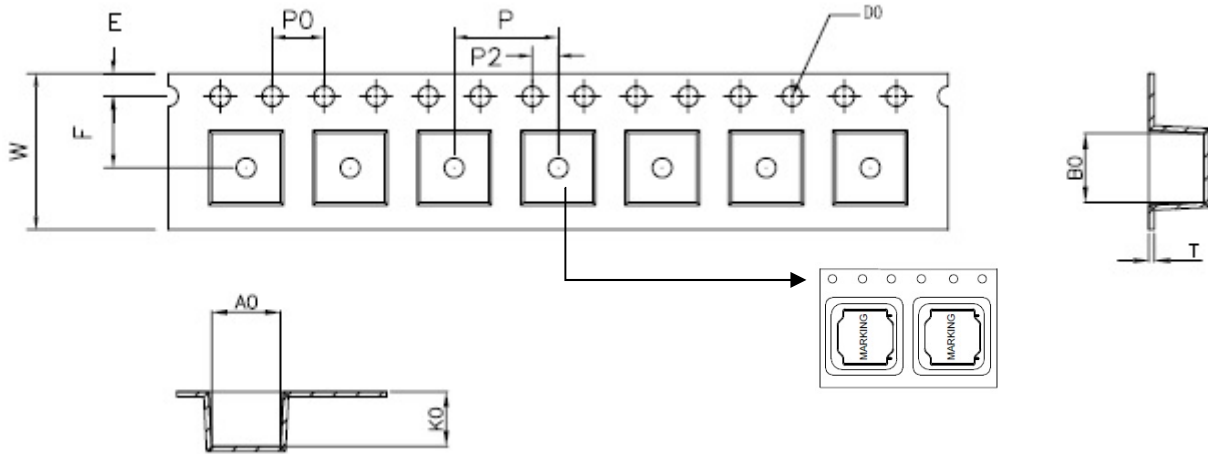
The products may be exposed to reflow soldering process of above profile up to two times.

8. PACKAGING

8-1 OUTER PACKING

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

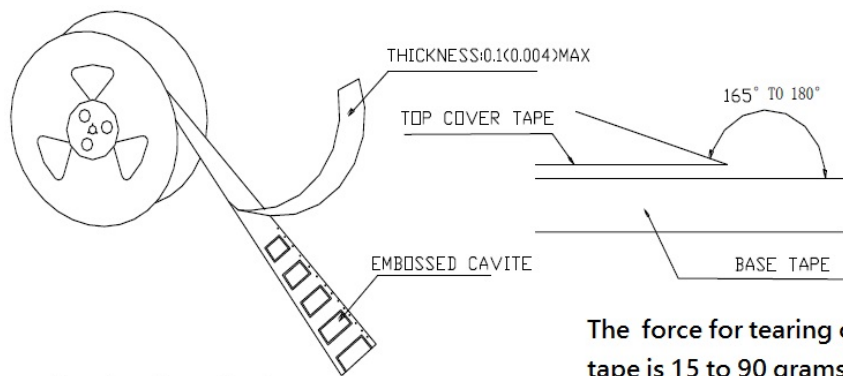
8-2 CARRIER TAPE DIMENSIONS



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