

# 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.

**Sales Office-Headquarter**

No. 566-1, Kao-Shi Rd., Yangmei, Taoyuan 32668,  
Taiwan  
TEL: +886-3-475-3355  
FAX: +886-3-485-4959

**Yong Zhou Plant**

Tao-Yuan Rd., Fenghuang Park, Lengshuitan  
District, Yongzhou, Hunan 425000, P.R.C.  
TEL: +86-746-8610-180  
FAX: +86-746-8610-181

**Sales Office-Dong Guan,China**

No.638,Mei Jing West Road Xiniupo Administrative  
Zone Dalang Town,Dong Guan City,GuangDong  
Province,China.  
TEL: +86-769-8555-0979  
FAX: +86-769-8555-0972

TESTED BY	CHECKED BY	APPROVED BY
<b>Zhikai Deng</b>	<b>Tieqiao Gong</b>	<b>Shengjun Zhou</b>

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# SPECIFICATION FOR APPROVAL

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

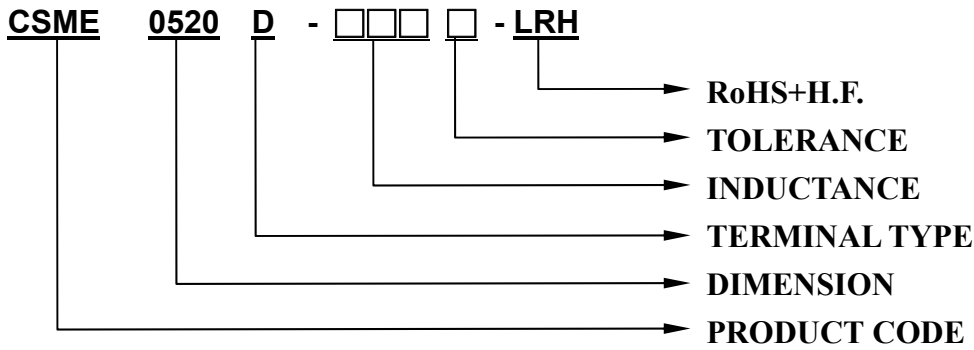
## ENGINEERING CHANGE NOTICE - RECORD

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

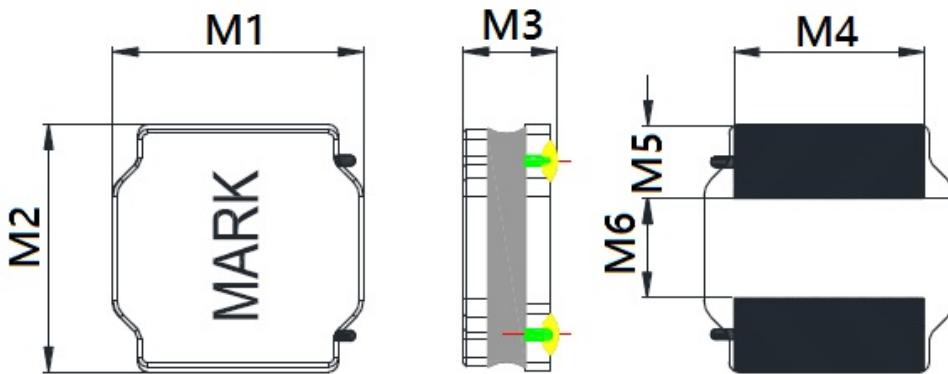
# SPECIFICATION FOR APPROVAL

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

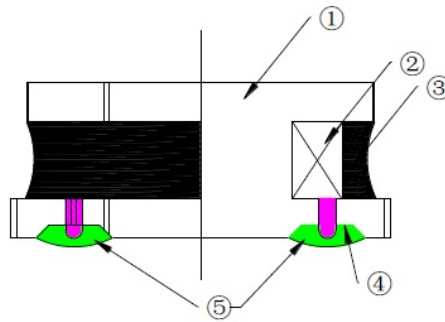
## 1. PART NUMBER IDENTIFICATION



## 2. MECHANICAL DIMENSION



## 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.

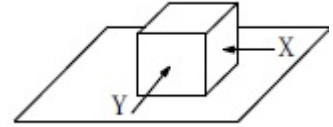
## 6. RELIABILITY PERFORMANCE

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.

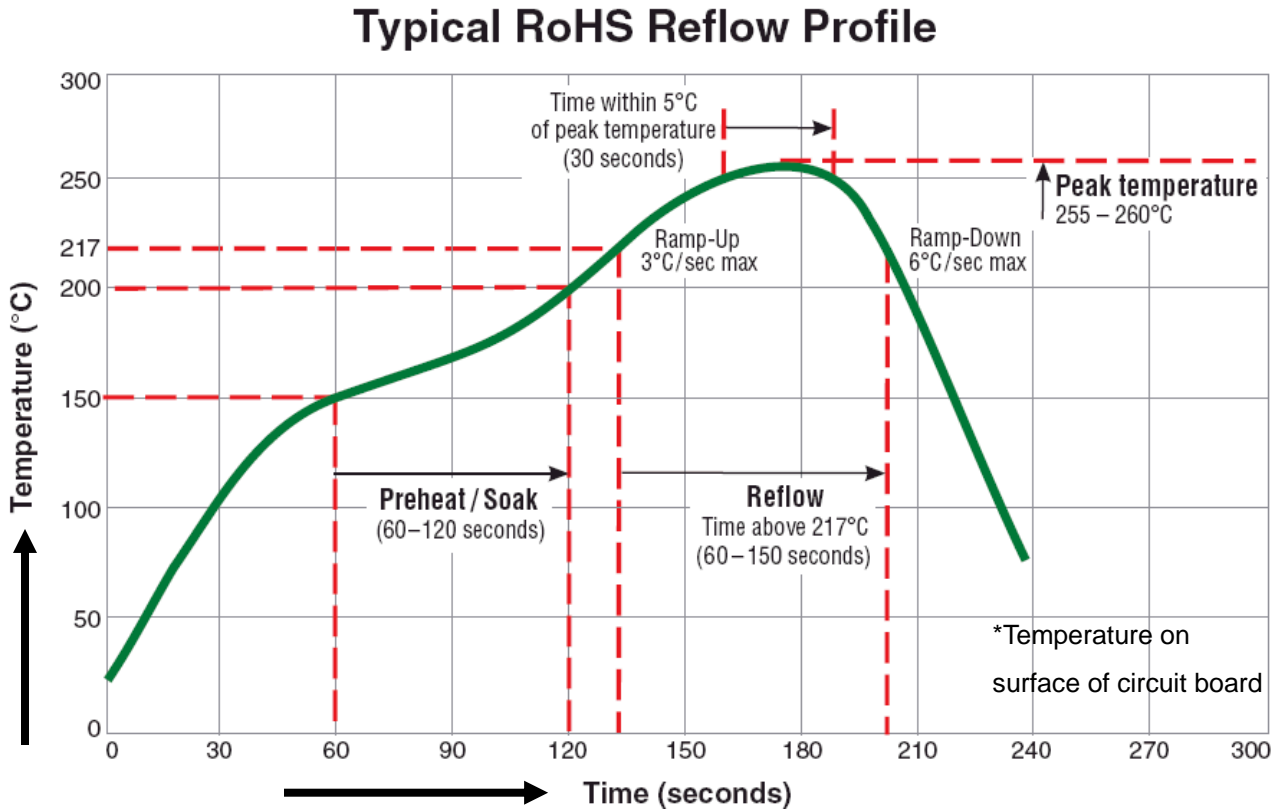
6-4.Electrode strength : No electrode detachment should be found when the device is pushed in two directions of X and Y with the force of 10.0N for  $60 \pm 2$  seconds after soldering between copper plate and the electrodes. (Refer to figure at right)



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  $96 \pm 4$  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



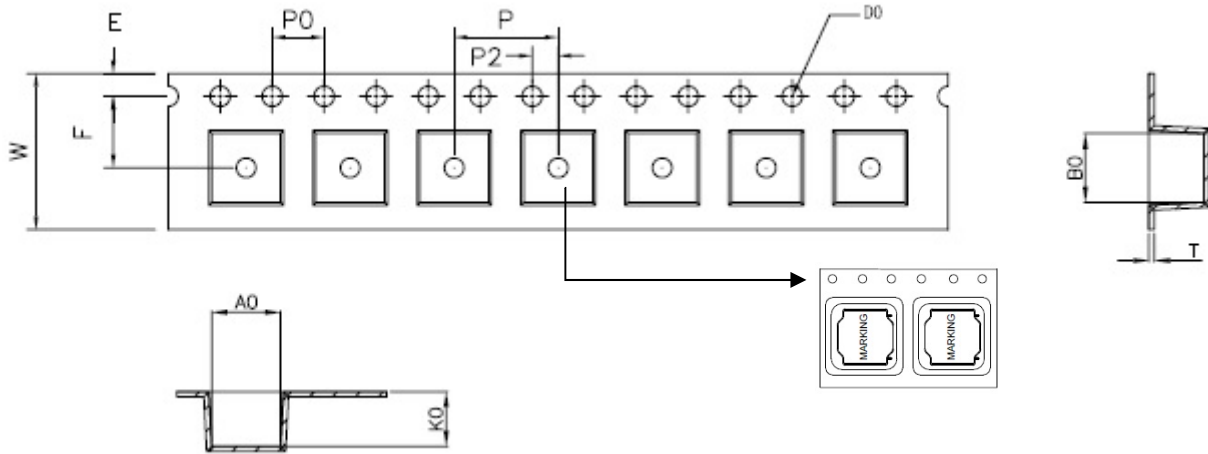
The products may be exposed to reflow soldering process of above profile up to two times.

## 8. PACKAGING

### 8-1 OUTER PACKING

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

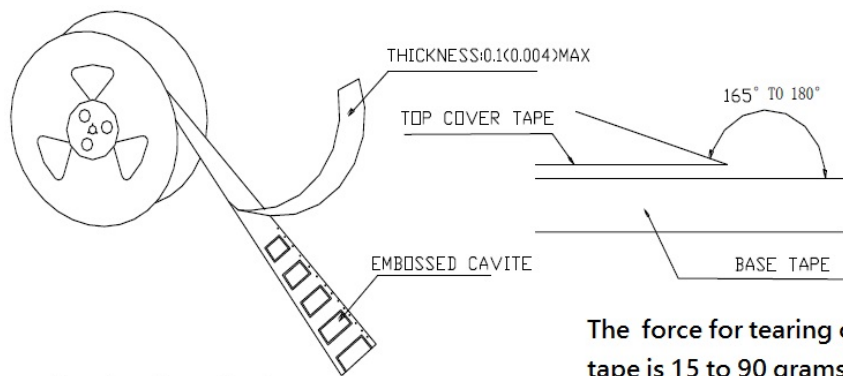
### 8-2 CARRIER TAPE DIMENSIONS



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



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