

# SPECIFICATION FOR APPROVAL

CUSTOMER	_____
CUST. PART NO.	_____
CUST. DOC. REV.	_____
DESCRIPTION	POWER CHOKE(RoHS+H.F.)
SAMPLE LOT NO.	_____
PART NO.	CSME0418D-XXXX-LRH
DOC. REV.	A
DATE	_____

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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# SPECIFICATION FOR APPROVAL

CUSTOMER	CUSTOMER P/N	REV.	SPL. LOT NO.	
PART NAME <b>POWER CHOKE (RoHS+H.F.)</b>	PART NO. <b>CSME0418D-XXXX-LRH</b>	REV. <b>A</b>	DATE OF ISSUE	Q'TY <b>0 PCS</b>

## ENGINEERING CHANGE NOTICE - RECORD

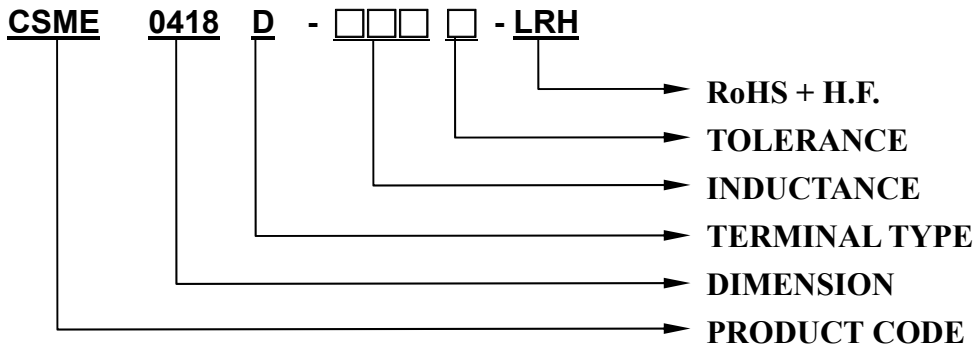
REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
A		<i>Zhikai Deng</i>		



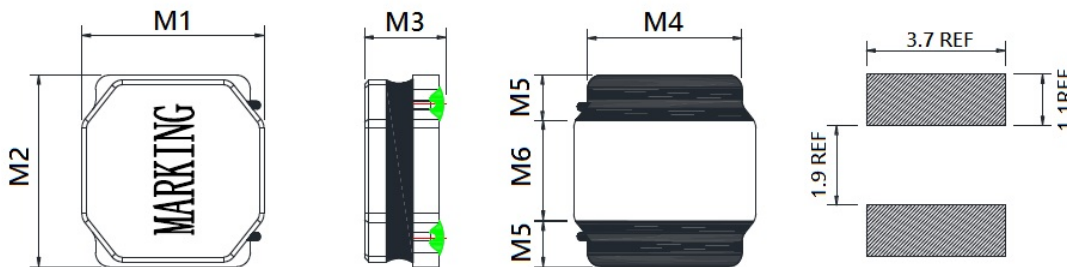
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※This is a RoHS and REACH compliant product whose related documents are available on request.  
 ※Graphic is only for dimensionally application.

## 1. PART NUMBER IDENTIFICATION



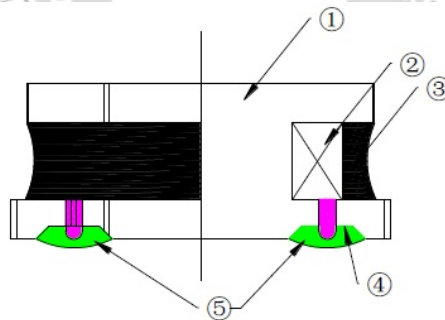
## 2. MECHANICAL DIMENSION



UNIT: mm

	DIM.	TOL.
M1	4.0	±0.2
M2	4.0	±0.2
M3	1.85	MAX.
M4	3.3	±0.2
M5	1.0	±0.2
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%

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## 5. ELECTRICAL CHARACTERISTICS

Part number	Mark	Inductance (uH)	DC Resistance (mΩ) ±20%.	Isat (A) MAX.	Irms (A) MAX.
CSME0418D-1R0N-LRH	1R0	1.0	27	4.00	3.20
CSME0418D-1R5N-LRH	1R5	1.5	37	3.30	2.40
CSME0418D-2R2M-LRH	2R2	2.2	42	3.00	2.20
CSME0418D-3R3M-LRH	3R3	3.3	55	2.30	2.00
CSME0418D-4R7M-LRH	4R7	4.7	70	2.00	1.70
CSME0418D-6R8M-LRH	6R8	6.8	98	1.60	1.45
CSME0418D-100M-LRH	100	10	150	1.30	1.20
CSME0418D-150M-LRH	150	15	210	1.10	0.85
CSME0418D-220M-LRH	220	22	290	0.90	0.72
CSME0418D-330M-LRH	330	33	480	0.70	0.55
CSME0418D-470M-LRH	470	47	755	0.65	0.60
CSME0418D-101M-LRH	101	100	1450	0.42	0.28
CSME0418D-221M-LRH	221	220	3800	0.28	0.20

□ TOLERANCE : M:±20%、N:±30%

※ INDUCTANCE : @100KHz,1.0V

※ 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 :  $\Delta t < 40^{\circ}\text{C}$  AT IRMS.

※ MSL : LEVEL 1.

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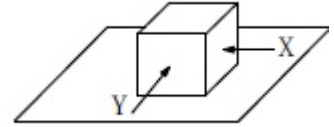
## 6. RELIABILITY PERFORMANCE

6-1.Storage Temperature range :  $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$

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)



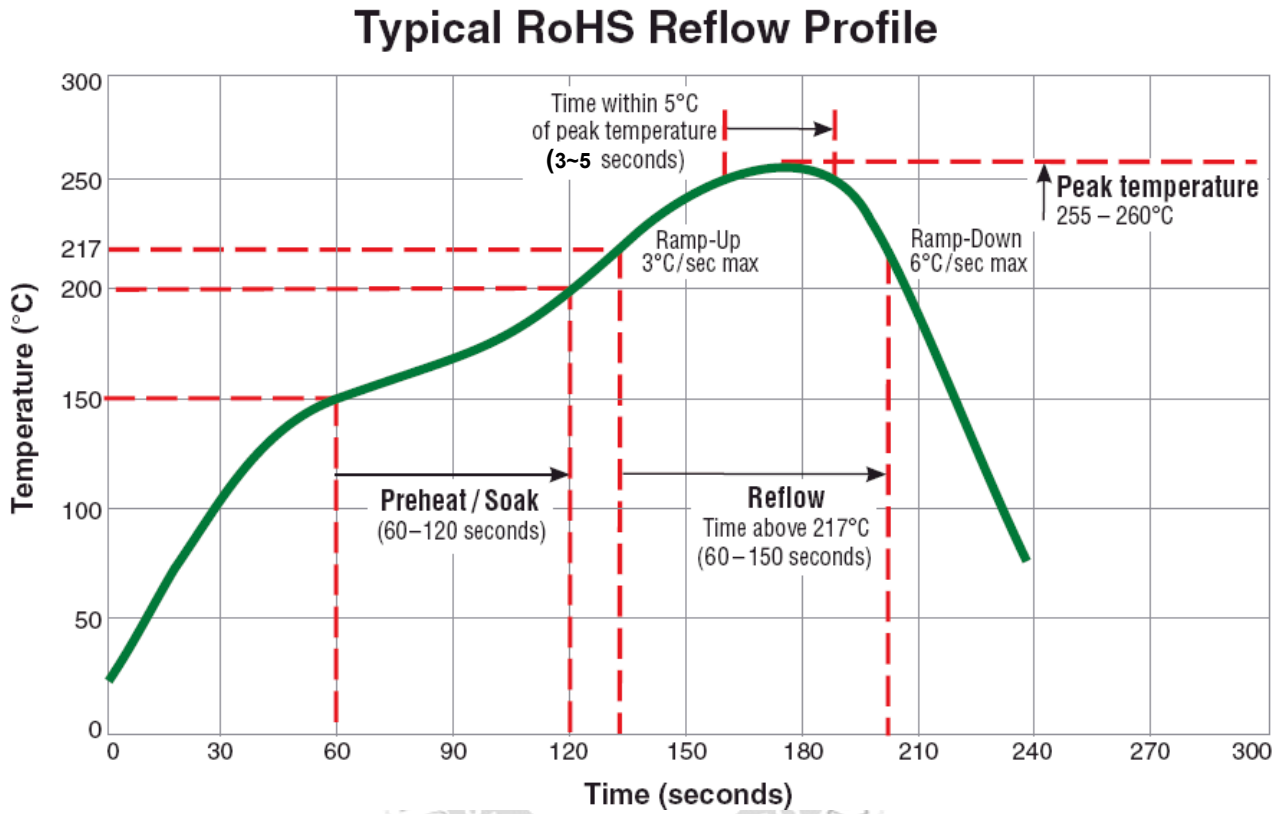
6-5.Vibration test : Inductance deviation is within  $\pm 10.0\%$  after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down, right and left. The frequency is  $10 \sim 55 \sim 10\text{Hz}$  and the amplitude of 1 minute cycle is 1.5mm PP.

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.



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## 7. TYPICAL RoHS REFLOW PROFILE



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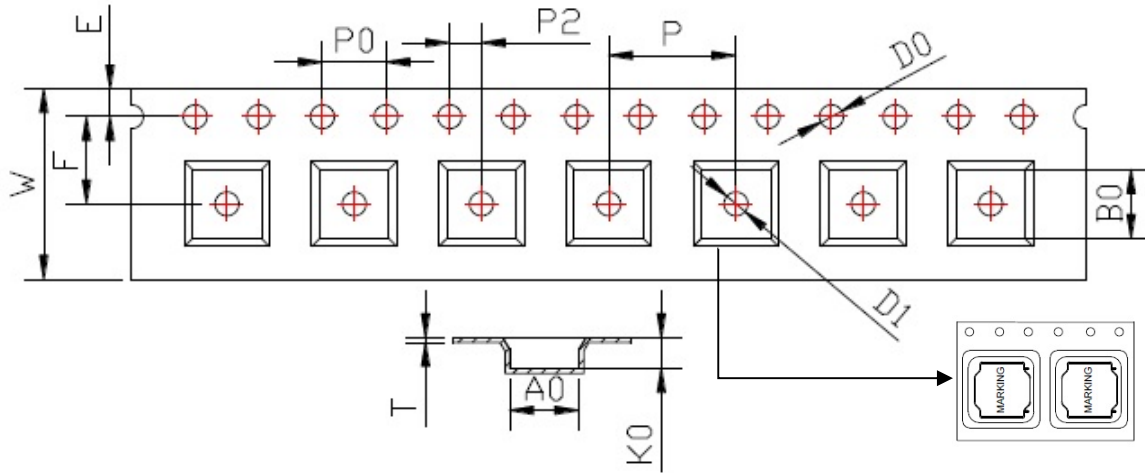
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## 8. PACKING

### 8-1 OUTER PACKING

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

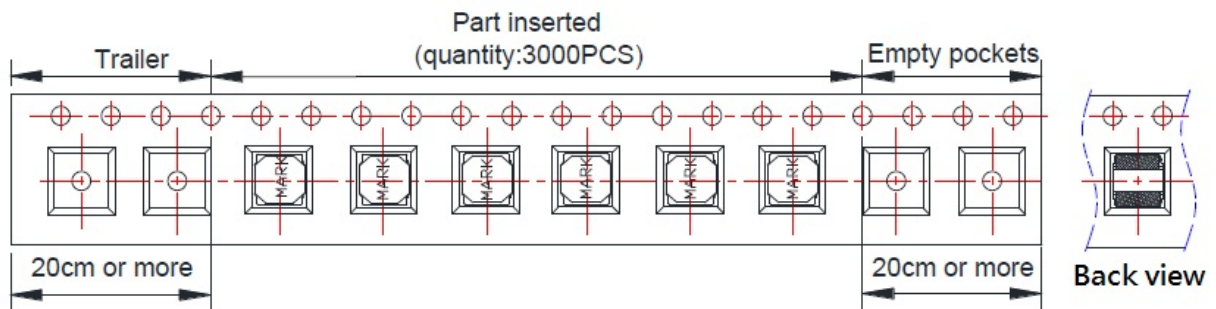
### 8-2 CARRIER TAPE DIMENSIONS



UNIT : mm

ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.0	4.35	4.35	1.95	8.00	5.50	1.75	1.50	1.50	4.00	2.00	0.30
TOLE	+0.30 -0.10	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.1	+0.1	±0.1	±0.1	±0.05

### 8-3 TAPING DIMENSIONS



### 8-4 Reel Dimensions

