

SPECIFICATION FOR APPROVAL

CUSTOMER	ROPLA
CUST. PART NO.	
CUST. DOC. REV.	
DESCRIPTION	POWER CHOKE (R _o HS+H.F.)
SAMPLE LOT NO.	S202112-0055
PART NO.	CSME0412D-150M-LRH
DOC. REV.	A
DATE	2022/01/05

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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CUSTOMER ROPLA	CUSTOMER P/N	REV.	SPL. LOT NO. S202112-0055	
PART NAME POWER CHOKE (RoHS+H.F.)	PART NO. CSME0412D-150M-LRH	REV. A	DATE OF ISSUE 2022/01/05	Q'TY 0 PCS

ENGINEERING CHANGE NOTICE - RECORD

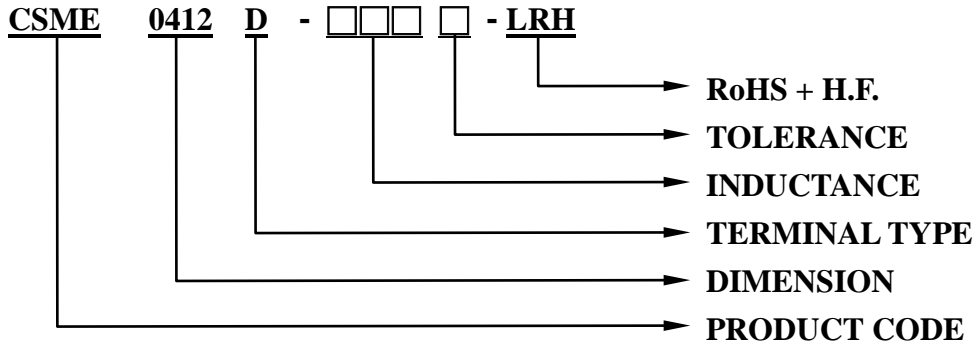
REVISION NO.	REVISION DESCRIPTION	AUTHOR	DATE	REMARK
A		<i>July Shen</i>	2022/01/05	



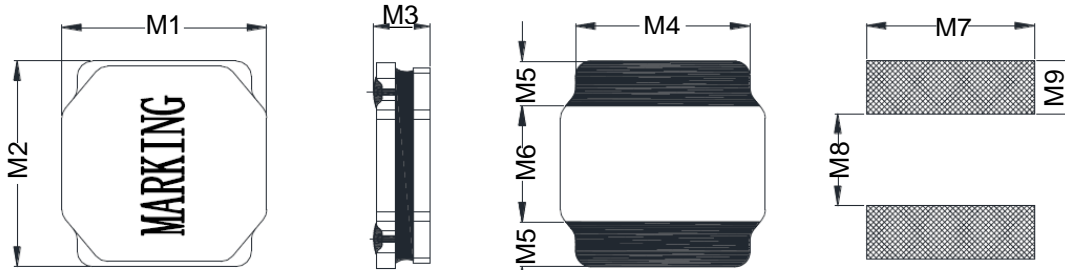
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※This is a RoHS and REACH compliant product whose related documents are available on request.
 ※Graphic is only for dimensionally application.

1. PART NUMBER IDENTIFICATION



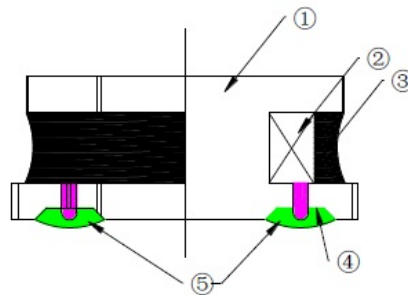
2. MECHANICAL DIMENSION



UNIT : mm

	DIM.	TOL.
M1	4.0	±0.2
M2	4.0	±0.2
M3	1.2	MAX.
M4	3.3	±0.2
M5	0.95	±0.2
M6	2.1	Ref.
M7	3.7	Ref.
M8	1.9	Ref.
M9	1.1	Ref.

3. STRUCTURE



4. MATERIAL LIST

NO	PARTS	MATERIAL	Ceaiya P/N
1	Drum Core	Ni-Zn Ferrite Core.	TZD、DYG
2	Wire	Polyurethane enameled copper wire.	YLSL
3	Adhesive	Epoxy Resin Magnetic Powder	
4	Plating Electrodes	Plating: Ag 10-20 μm Ni 1-3 μm Sn 3-7 μm	
5	Outer Electrodes	Top surface solder coating Sn99%、Ag0.3%、Cu0.7%	YX

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5. ELECTRICAL SPECIFICATION

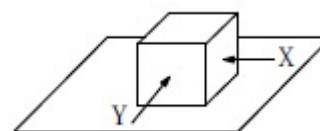
Part number	Marking	Inductance (μ H)	Inductance Tolerance	DC Resistance (Ω)		Isat (A)		Irms (A)	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CSME0412D-150M-LRH	150	15	$\pm 20\%$	0.400	0.310	0.68	0.80	0.65	0.80

Note:

1. Inductance: @100KHz,1.0V
2. Test Machine: HIOKI3532-50 OR EQUIVALENT
3. DC Resistance: HIOKI 3540 OR EQUIVALENT
4. ISAT / IRISE: HP4284+42841A OR EQUIVALENT
5. Isat(A): DC Saturation Current that will cause initial inductance to drop approximately 30% max.
6. Irise(A): DC Current that will cause an approximate ΔT of 40 °C.
7. MSL: LEVEL 1.

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 10 ± 2 seconds after soldering between copper plate and the electrodes. (Refer to figure at right)

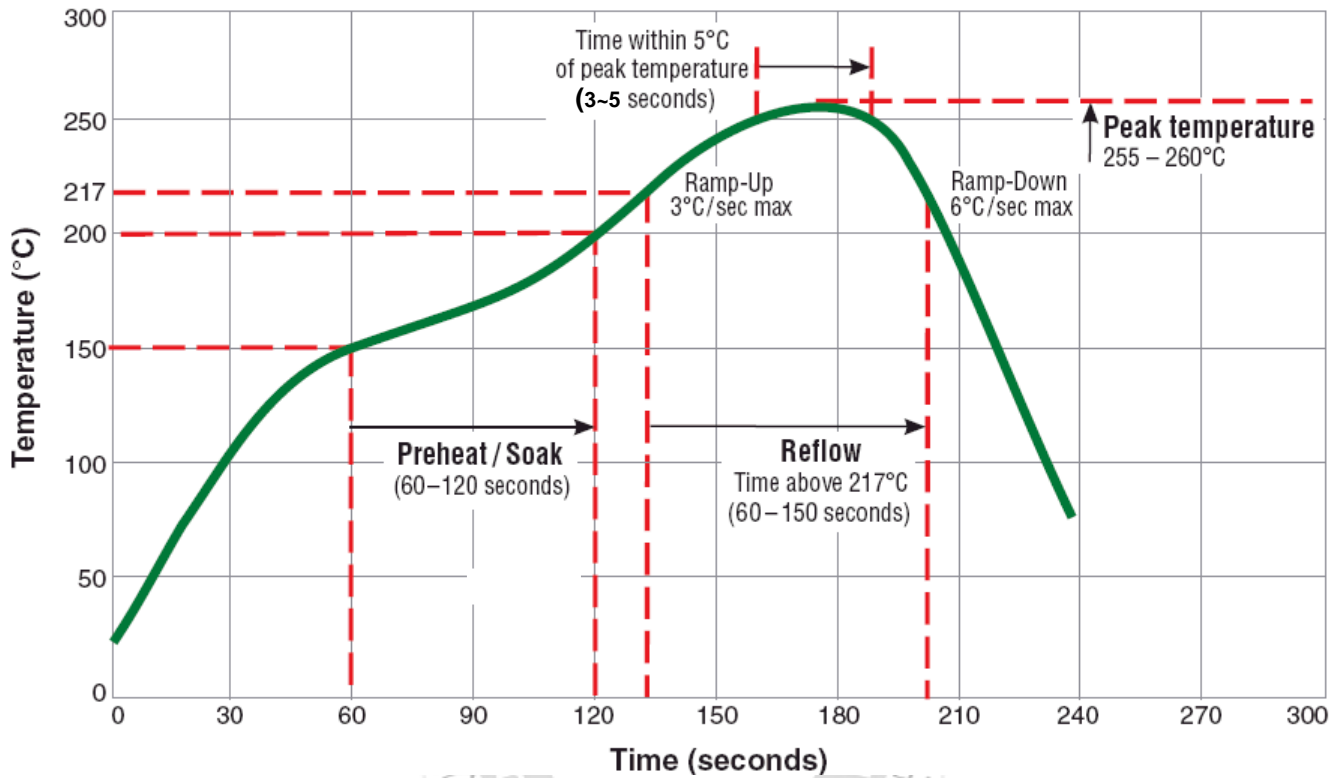


- 6-5.Vibration test : Inductance deviation is within $\pm 10.0\%$ after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down, right and left. The frequency is $10 \sim 55 \sim 10\text{Hz}$ and the amplitude of 1 minute cycle is 1.5mm PP.
- 6-6.Humidity test :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

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7. REFLOW PROFILE

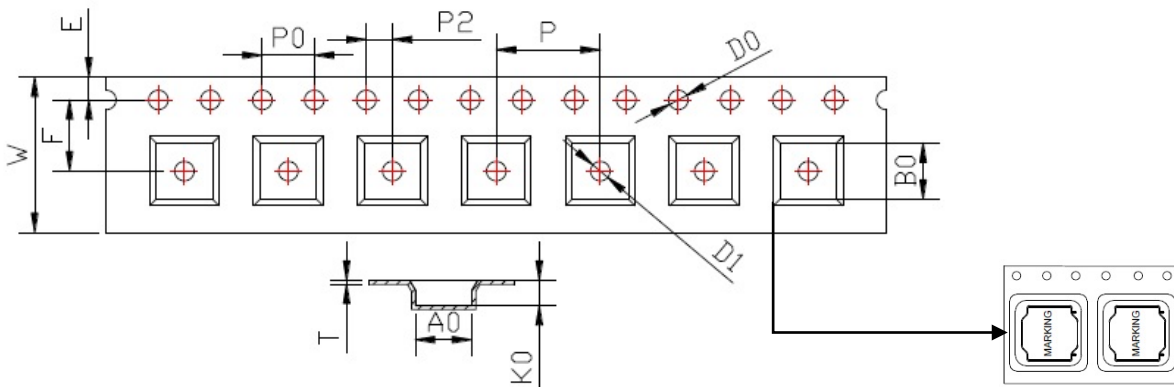
Typical RoHS Reflow Profile



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8. PACKING

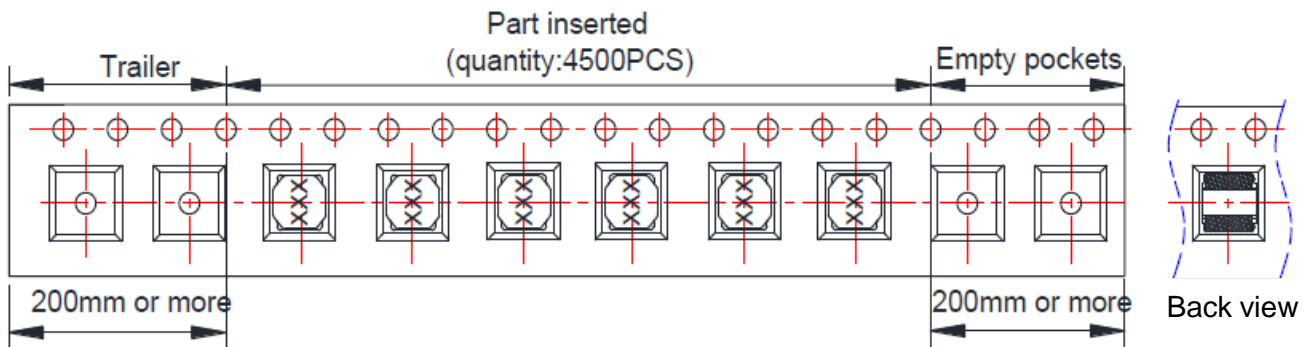
8-1 CARRIER TAPE DIMENSIONS



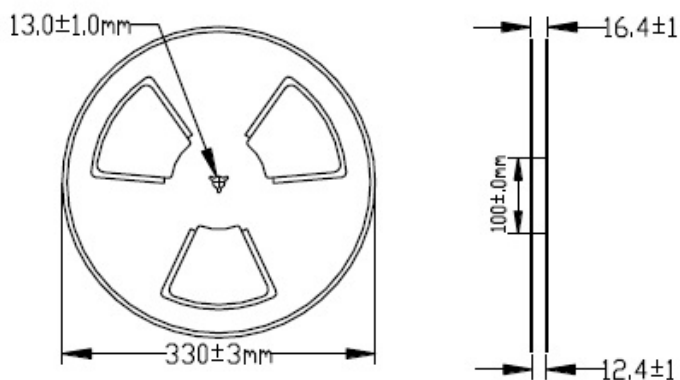
UNIT : mm

ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.0	4.3	4.3	1.6	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

8-2 TAPING DIMENSIONS



8-3 REEL DIMENSIONS



8-4 PACKAGE SPECIFICATION

- 4.5KPCS/Reel
- 13.5KPCS/Inner Box
- 40.5KPCS/Outer Box