

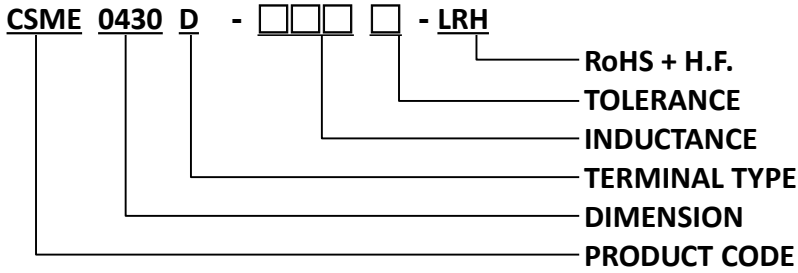


PRODUCT SPECIFICATION

DOCUMENT NO. ENS000154070

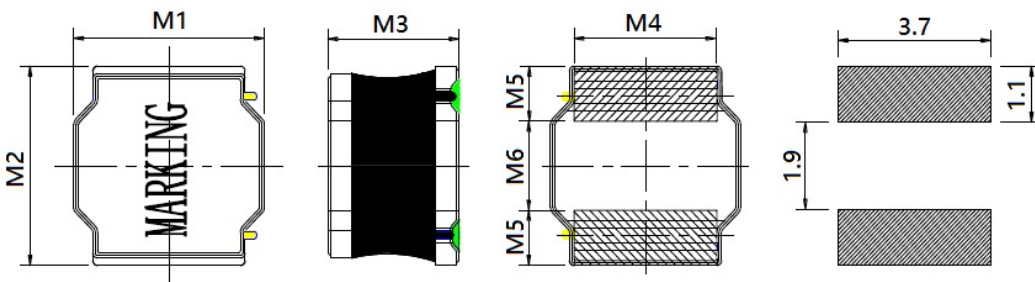
DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
CSME0430D-XXXX-LRH	Zhuoling Tang	Tieqiao Gong	Tieqiao Gong	Dick Wang

1. PART NUMBER IDENTIFICATION



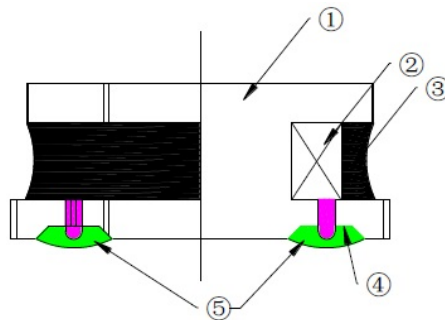
2. MECHANICAL DIMENSION

UNIT: mm

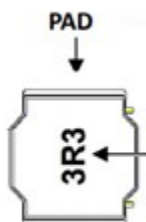


	DIM.	TOL.
M1	4.0	±0.2
M2	4.0	±0.2
M3	3.0	MAX.
M4	3.3	±0.2
M5	1.0	±0.2
M6	2.0	±0.3

3. STRUCTURE



MARKING:



Marking Direction: PAD is on the upper and lower sides with the font facing up and centered.

Example: 3R3 Stands for Marking → 3.3μH

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	Marking	Inductance (μH)	Inductance Tolerance	DC Resistance (mΩ) ±30%	Isat (A) MAX.	Irms (A) MAX.
CSME0430D-R47□-LRH	R47	0.47	N	11	7.50	3.50
CSME0430D-1R0□-LRH	1R0	1.0	N	15	5.90	3.40
CSME0430D-1R5□-LRH	1R5	1.5	N	25	4.85	3.30
CSME0430D-1R8□-LRH	1R8	1.8	N、M	30	4.25	3.20
CSME0430D-2R2□-LRH	2R2	2.2	M	35	4.10	2.95
CSME0430D-3R3□-LRH	3R3	3.3	M	40	3.30	2.40
CSME0430D-3R6□-LRH	3R6	3.6	M	53	3.10	2.30
CSME0430D-3R9□-LRH	3R9	3.9	M	57	3.00	2.10
CSME0430D-4R7□-LRH	4R7	4.7	M	60	2.90	2.00
CSME0430D-5R6□-LRH	5R6	5.6	M	70	2.75	1.95
CSME0430D-6R8□-LRH	6R8	6.8	M	75	2.60	1.70
CSME0430D-7R5□-LRH	7R5	7.5	M	90	2.20	1.65
CSME0430D-8R2□-LRH	8R2	8.2	M	100	2.10	1.60
CSME0430D-100□-LRH	100	10	M	115	1.95	1.50
CSME0430D-120□-LRH	120	12	M	140	1.70	1.35
CSME0430D-150□-LRH	150	15	M	190	1.65	1.15
CSME0430D-180□-LRH	180	18	M	215	1.40	1.10
CSME0430D-220□-LRH	220	22	M	225	1.30	1.00
CSME0430D-330□-LRH	330	33	M	330	1.10	0.84
CSME0430D-470□-LRH	470	47	M	500	0.90	0.72
CSME0430D-560□-LRH	560	56	M	560	0.85	0.65
CSME0430D-680□-LRH	680	68	M	750	0.75	0.55
CSME0430D-820□-LRH	820	82	M	950	0.68	0.50
CSME0430D-101□-LRH	101	100	M	1150	0.60	0.45
CSME0430D-151□-LRH	151	150	M	2350	0.50	0.35
CSME0430D-181□-LRH	181	180	M	2500	0.40	0.35

Note: □Inductance Tolerance: M: ±20%, N: ±30%

1. Inductance: @100KHz,0.25V

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. Irms (A): DC Current that will cause an approximate ΔT of 40°C

※MSL: LEVEL 1.

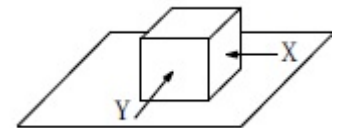
6. RELIABILITY PERFORMANCE

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)

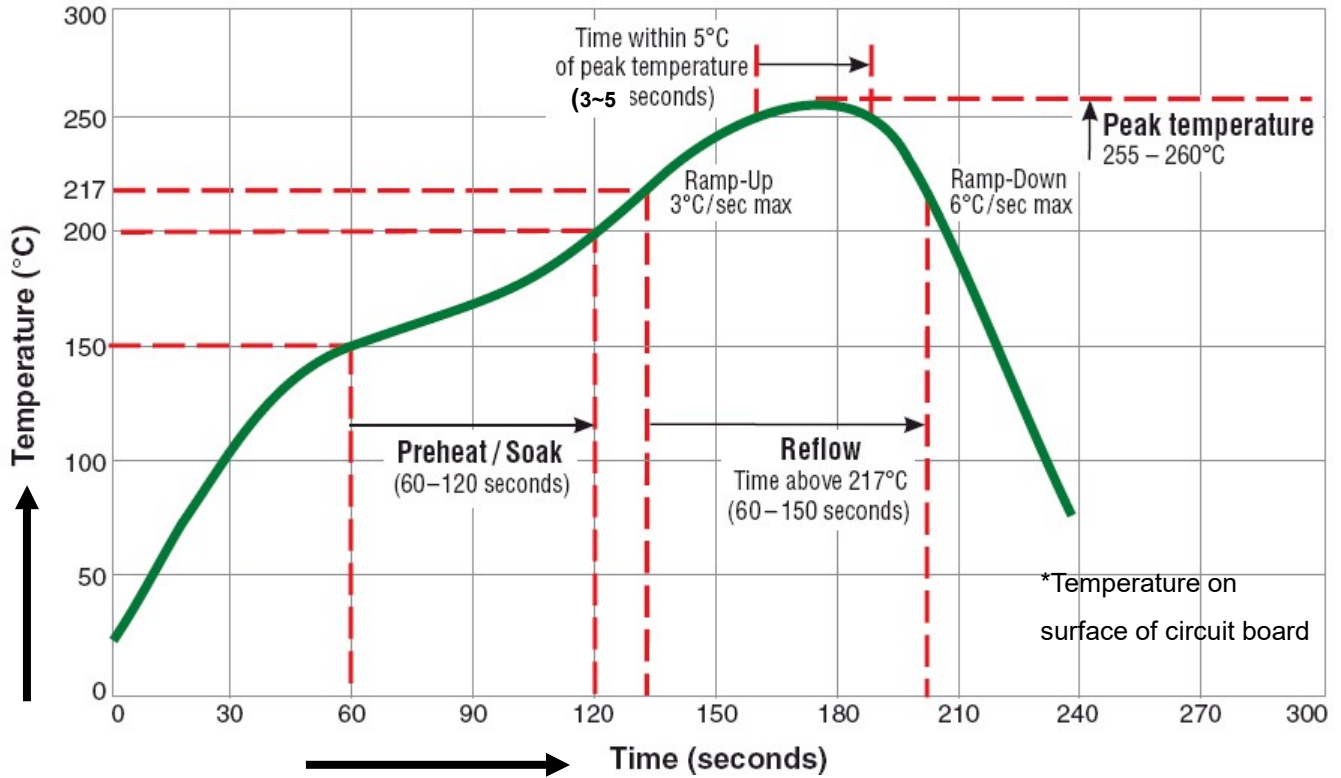


6-5.Vibration test : Inductance deviation is within $\pm 10.0\%$ after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down, right and left. The frequency is $10 \sim 55 \sim 10\text{Hz}$ and the amplitude of 1 minute cycle is 1.5mm PP.

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.

7. REFLOW CHART

Typical RoHS Reflow Profile



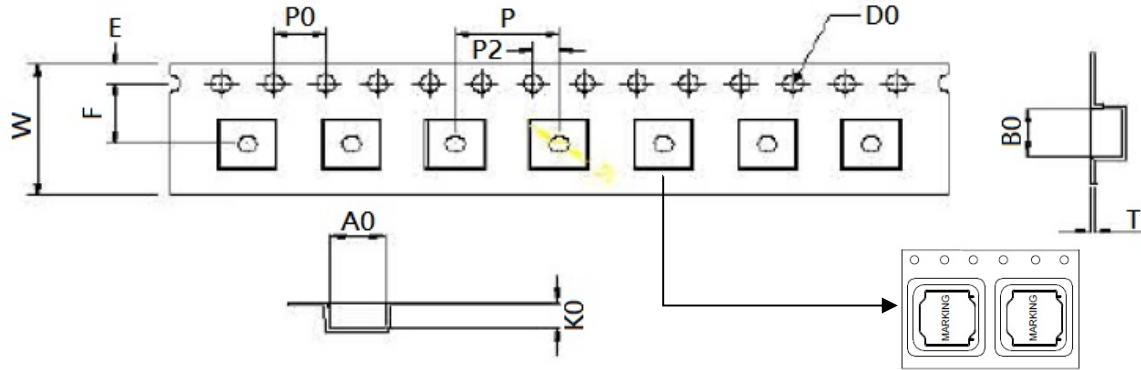
The products may be exposed to reflow soldering process of above profile up to two times.

8. PACKING

8-1 OUTER PACKING

2 KPCS/REEL;6 KPCS/INNER BOX;18 KPCS/OUTER BOX

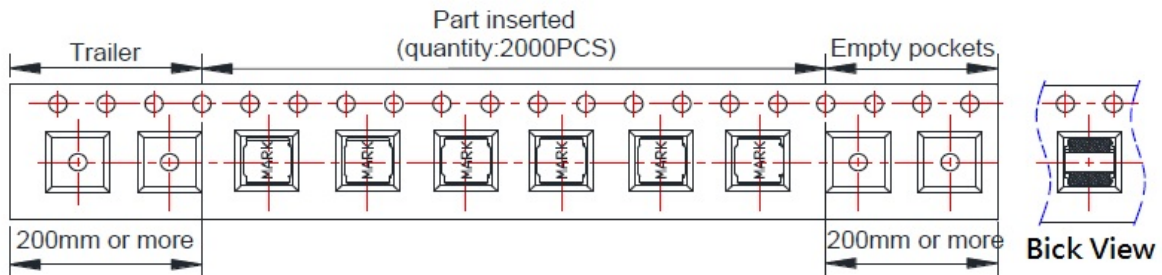
8-2 CARRIER TAPE DIMENSIONS



UNIT : mm

ITEM	W	A0	B0	K0	P	F	E	D0	D1	P0	P2	T
DIM	12.0	4.5	4.5	3.2	8.0	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

