



◆ **Features**

- 1、Magnetic-resin shielded construction reduces buzz noise to ultra-low levels;
- 2、Metallization on ferrite core results in excellent shock resistance and damage-free durability;
- 3、Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI);
- 4、30% higher current rating than conventional inductors of equal size;
- 5、Take up less PCB real estate and save more power.



◆ **Applications**

- 1、LED Lighting;
- 2、Mobile devices with multifunction such as adding color TV and camera;
- 3、Flat-screen TVs, blue-ray disc recorders, set top boxes;
- 4、Notebooks, desktop computers, servers, graphic cards;
- 5、Portable gaming devices, personal navigation systems, personal multimedia devices;
- 6、Automotive systems
- 7、Telecom basestations

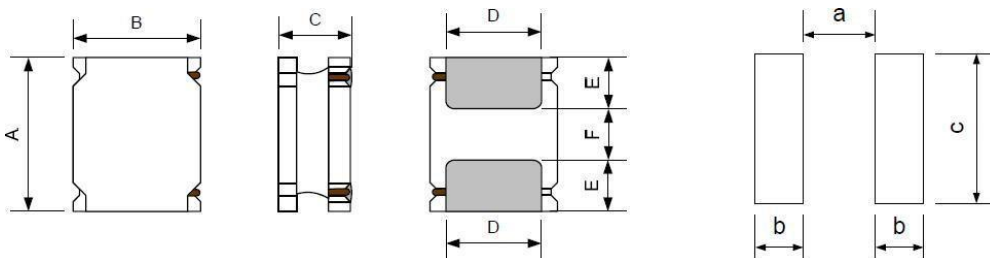
◆ **Lead Free PartNumbering**

CMLW 6028 S 100 M S T  
(1) (2) (3) (4) (5) (6) (7)

- (1) Series Type
- (2) Dimension: L X H
- (3) Material Code
- (4) Inductance: 2R2=2.2μH ;  
100=10μH; 101=100μH
- (5) Inductance Tolerance: M=±20%, N=±30%
- (6) Company Code
- (7) Packaging : Tape Carrier Package

◆ **Dimensions**

Recommended Land Pattern



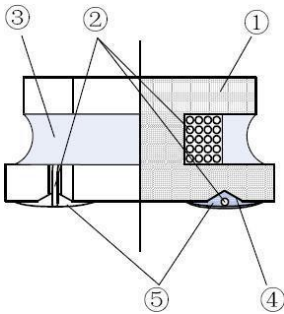
Unit:mm

Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
CMLW6028S	6.0±0.3	6.0±0.3	2.8Max.	4.9±0.3	1.55±0.3	2.90±0.3	2.8	1.7	5.7

◆ Electrical Characteristics

- 1) Operating temperature range (Including self-heating) : -40°C ~ +125°C
- 2) Storage temperature range (packaging conditions): -10°C~+40°C and RH 70% (Max.)

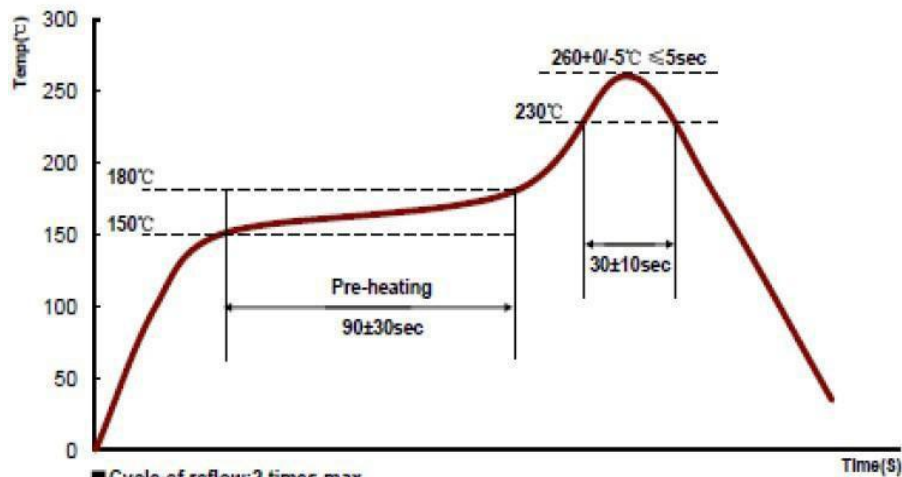
◆ Construction and material



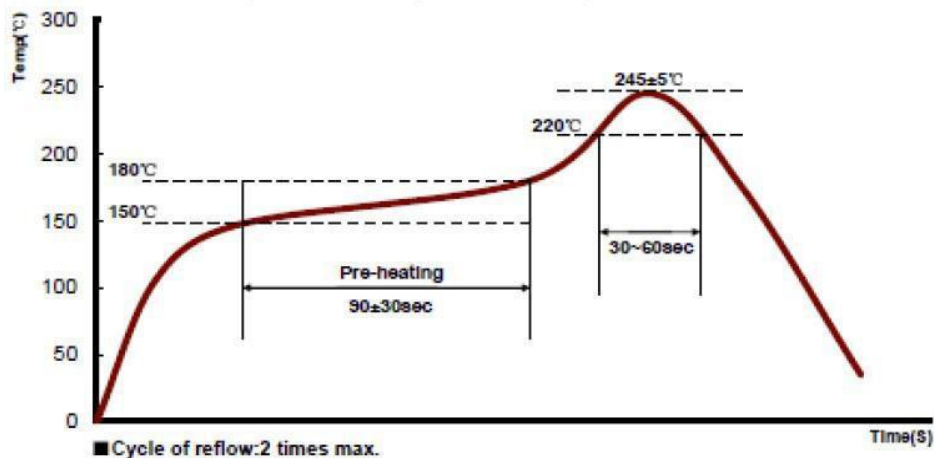
Code	Part Name	Material Name
①	Ferrite Core	Ni-Zn Ferrite
②	Wire	Polyurethane system enameled copper wire
③	Magnetic Glue	Epoxy resin and magnetic powder
④	Plating Electrodes	Ag
		Ni
		Sn
⑤	Outer Electrodes	Top surface solder coating Sn , Ag, Cu

◆ REFLOW-PROFILE

Limit Profile



Standard Profile (for EOC Solder paste S70G-HF)



◆ Specification

Part Number	Inductance @100KHz, 1V ( $\mu$ H)	DC Resistance $\pm 30\%$ ( $\Omega$ )	Min.Self-resonant Frequency (MHz)	Saturation Current(A)	Heat Rating Current (A)
		DCR	S.R.F	Isat	Irms
CMLW6028S Series					
CMLW6028S1R0MST	1.0 $\pm 20\%$	0.010	70	6.00	5.20
CMLW6028S1R5MST	1.5 $\pm 20\%$	0.013	65	6.00	4.58
CMLW6028S2R2NST	2.2 $\pm 30\%$	0.015	56	5.10	4.09
CMLW6028S3R3MST	3.3 $\pm 20\%$	0.025	41	3.63	3.48
CMLW6028S4R7NST	4.7 $\pm 30\%$	0.030	35	3.00	3.08
CMLW6028S6R8MST	6.8 $\pm 20\%$	0.047	27	2.85	2.40
CMLW6028S8R2MST	8.2 $\pm 20\%$	0.055	24	2.60	2.25
CMLW6028S100MST	10 $\pm 20\%$	0.072	23	2.04	1.95
CMLW6028S120MST	12 $\pm 20\%$	0.080	18	1.80	1.85
CMLW6028S150MST	15 $\pm 20\%$	0.125	18	1.75	1.45
CMLW6028S180MST	18 $\pm 20\%$	0.120	15	1.52	1.45
CMLW6028S220MST	22 $\pm 20\%$	0.140	14	1.60	1.40
CMLW6028S270MST	27 $\pm 20\%$	0.155	13	1.50	1.32
CMLW6028S330MST	33 $\pm 20\%$	0.185	12	1.35	1.22
CMLW6028S390MST	39 $\pm 20\%$	0.225	11	1.25	1.10
CMLW6028S470MST	47 $\pm 20\%$	0.245	9.5	1.15	1.06
CMLW6028S620MST	62 $\pm 20\%$	0.345	7.7	0.95	0.89
CMLW6028S680MST	68 $\pm 20\%$	0.360	7.7	0.95	0.86
CMLW6028S750MST	75 $\pm 20\%$	0.410	7.7	0.90	0.81
CMLW6028S820MST	82 $\pm 20\%$	0.445	7.7	0.90	0.78
CMLW6028S101MST	100 $\pm 20\%$	0.500	7.1	0.65	0.70

◆ Note

1 : All test data is referenced to 20°C ambient; 2 :

Rated current: Isat or Irms, whichever is smaller;

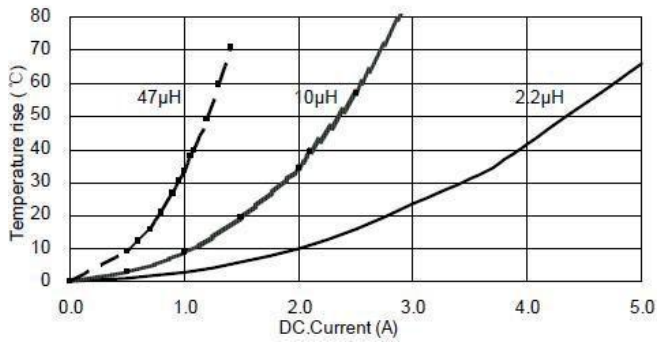
3 : Isat: DC current at which the inductance drops approximate 30% from its value without current; 4 : Irms:

DC current that causes the temperature rise ( $\Delta T = 40^\circ\text{C}$ ) from 20°C ambient.

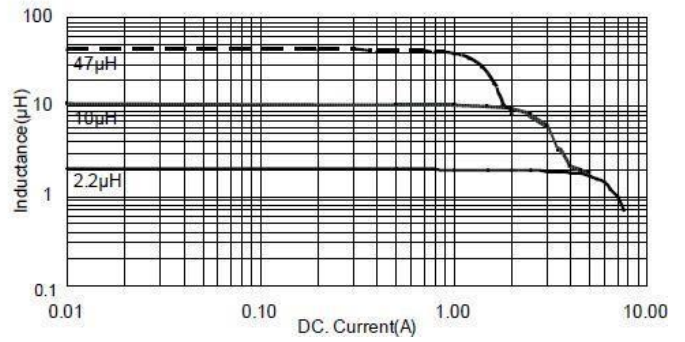
◆ Standard Packing Quantity: 2000 pcs/reel

◆ TYPICAL ELECTRICAL CHARACTERISTICS  
CMLW6028S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



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