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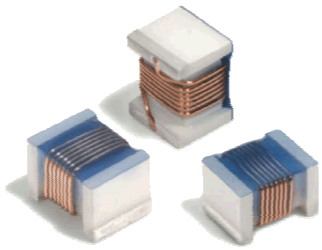
CMCW1608C Series

Wire Wound Chip Ceramic Inductor

Pb

◆ Features

1、Small chip suitable for surface mounting；
2、High Q value and high self-resonant frequency with ceramic material；
3、Tight inductance tolerance and stable inductance; at high frequency；
4、RoHS Compliant。



◆ Application

1、High frequency circuit in telecommunication and other equipments；
2、Mobile phones such as GSM, CDMA, PDC, etc；
3、Bluetooth, W-LAN, Broadband network。

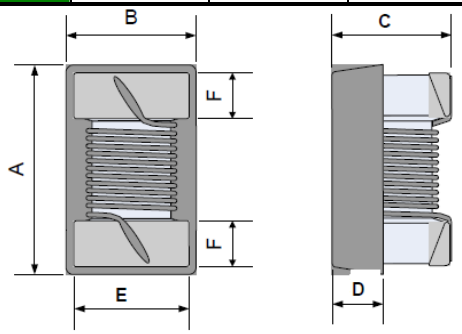
◆ PRODUCT IDENTIFICATION

CMCW	1608	C	R10	J	S	T
(1)	(2)	(3)	(4)	(5)	(6)	(7)

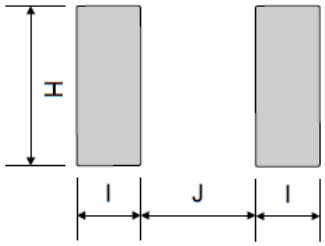
(1) Series Type
(2) Chip Size（mm）:Length X Width
(3) Material Code
(4) Inductance：0N1=0.1nH；4N7=4.7nH
10N=10nH；R10=100nH
1R0=1000nH
(5) Inductance Tolerance：B=±1%；G=±2%；
J=±5%；K=±10%；
(6) Company Code
(7) Packaging：Tape Carrier Package

◆ SHAPE AND DIMENSIONS (unit：mm)

Series	A	B	C	D	E	F	H	I	J
CMCW1005C	1.2 ±0.10	0.60±0.10	0.60±0.10	0.20±0.05	0.50±0.05	0.20±0.05	0.64±0.05	0.40±0.05	0.60±0.05
CMCW1608C	1.68±0.10	1.00±0.10	0.85±0.10	0.32±0.05	0.76±0.05	0.33±0.05	1.02±0.05	0.60±0.05	0.60±0.05
CMCW2012C	2.20±0.10	1.62±0.10	1.45±0.10	0.48±0.05	1.22±0.05	0.45±0.05	1.72±0.05	1.02±0.05	0.76±0.05
CMCW2520C	2.65±0.10	2.60±0.10	2.00±0.10	0.50±0.05	2.05±0.05	0.45±0.05	2.50±0.05	1.02±0.05	1.27±0.05
CMCW3216C	3.46±0.10	2.06±0.10	1.42±0.10	0.50±0.05	1.55±0.05	0.45±0.05	1.88±0.05	1.02±0.05	1.78±0.05
CMCW3225C	3.46±0.10	2.75±0.10	2.60±0.10	0.50±0.05	2.05±0.05	0.45±0.05	2.97±0.05	1.02±0.05	1.78±0.05
CMCW4532C	4.75±0.10	3.71±0.10	3.33±0.10	1.72±0.05	2.85±0.05	0.53±0.05	3.00±0.05	1.14±0.05	3.00±0.05



Land Pattern



CMCW1608C Series

◆ Specifications

Part Number	Inductance	Min. Quality Factor	L/Q Test Condition	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
	nH	Q	MHZ	Ω	mA	MHZ
CMCW1608C Series						
CMCW1608C1N6JST	1.6	18	250	0.035	1150	>6000
CMCW1608C1N7JST	1.7	16	250	0.043	1000	>6000
CMCW1608C1N8JST	1.8	18	250	0.043	1000	>6000
CMCW1608C2N2JST	2.2	13	250	0.15	700	>6000
CMCW1608C2N7JST	2.7	25	250	0.043	1000	>6000
CMCW1608C3N3JST	3.3	25	250	0.059	850	>6000
CMCW1608C3N6JST	3.6	25	250	0.059	850	>6000
CMCW1608C3N9JST	3.9	25	250	0.059	850	>6000
CMCW1608C4N3JST	4.3	25	250	0.059	850	>6000
CMCW1608C4N7JST	4.7	25	250	0.065	800	>6000
CMCW1608C5N1JST	5.1	21	250	0.13	600	>6000
CMCW1608C6N2JST	6.2	29	250	0.095	700	>6000
CMCW1608C6N8JST	6.8	29	250	0.095	700	>6000
CMCW1608C7N5JST	7.5	33	250	0.095	700	>6000
CMCW1608C8N2JST	8.2	31	250	0.095	700	>6000
CMCW1608C8N7JST	8.7	31	250	0.095	700	>6000
CMCW1608C9N1JST	9.1	30	250	0.12	620	6000
CMCW1608C9N5JST	9.5	26	250	0.16	540	6000
CMCW1608C10NJST	10	30	250	0.13	600	6000
CMCW1608C11NJST	11	35	250	0.13	600	6000
CMCW1608C12NJST	12	35	250	0.13	600	6000
CMCW1608C13NJST	13	35	250	0.13	600	6000
CMCW1608C15NJST	15	37	250	0.15	550	6000
CMCW1608C16NJST	16	37	250	0.15	550	5500
CMCW1608C18NJST	18	37	250	0.15	550	5500
CMCW1608C20NJST	20	37	250	0.15	550	4900
CMCW1608C22NJST	22	38	250	0.19	490	4600
CMCW1608C23NJST	23	40	250	0.19	490	3800
CMCW1608C24NJST	24	40	250	0.19	490	3800
CMCW1608C25NJST	25	40	250	0.19	490	3700
CMCW1608C27NJST	27	38	250	0.19	490	3700
CMCW1608C30NJST	30	38	250	0.21	470	3300
CMCW1608C33NJST	33	40	250	0.21	470	3200

CMCW1608C Series

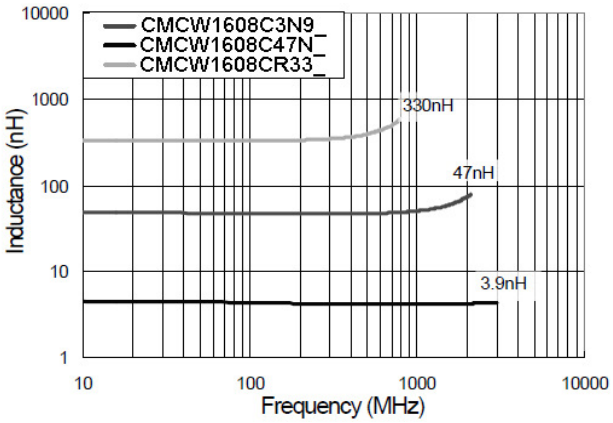
◆ Specifications

Part Number	Inductance	Min. Quality Factor	L/Q Test Condition	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
	nH	Q	MHZ	Ω	mA	MHZ
CMCW1608C Series						
CMCW1608C36NJST	36	40	250	0.22	460	2900
CMCW1608C39NJST	39	40	250	0.22	460	2800
CMCW1608C43NJST	43	40	250	0.27	400	2700
CMCW1608C47NJST	47	36	200	0.27	400	2600
CMCW1608C51NJST	51	35	200	0.3	390	2400
CMCW1608C56NJST	56	38	200	0.35	360	2400
CMCW1608C62NJST	62	36	200	0.38	350	2300
CMCW1608C68NJST	68	36	200	0.38	350	2200
CMCW1608C72NJST	72	34	150	0.43	320	2100
CMCW1608C82NJST	82	34	150	0.5	300	2000
CMCW1608C91NJST	91	34	150	0.52	300	1900
CMCW1608CR10JST	100	31	150	0.66	260	1800
CMCW1608CR11JST	110	32	150	0.73	250	1700
CMCW1608CR12JST	120	32	150	0.75	240	1600
CMCW1608CR15JST	150	32	150	1.12	200	1400
CMCW1608CR16JST	160	32	150	1.12	200	1400
CMCW1608CR18JST	180	25	100	1.38	180	1300
CMCW1608CR20JST	200	25	100	1.9	150	1250
CMCW1608CR22JST	220	25	100	2.1	140	1200
CMCW1608CR24JST	240	25	100	2.75	120	1100
CMCW1608CR25JST	250	25	100	2.8	120	1100
CMCW1608CR27JST	270	26	100	3	120	960
CMCW1608CR33JST	330	26	100	4.2	100	800
CMCW1608CR39JST	390	27	100	4.5	100	800
CMCW1608CR42JST	420	27	100	5.4	90	800
CMCW1608CR47JST	470	27	100	5.7	90	700
CMCW1608CR56JST	560	27	100	8.1	70	650

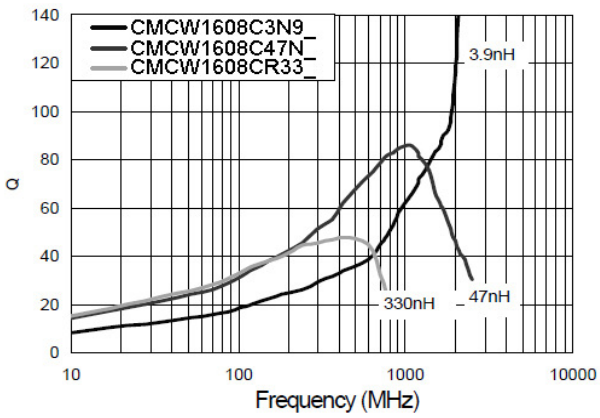
◆ Typical Electrical Characteristic

CMCW1608C Series

Inductance vs. Frequency Characteristics

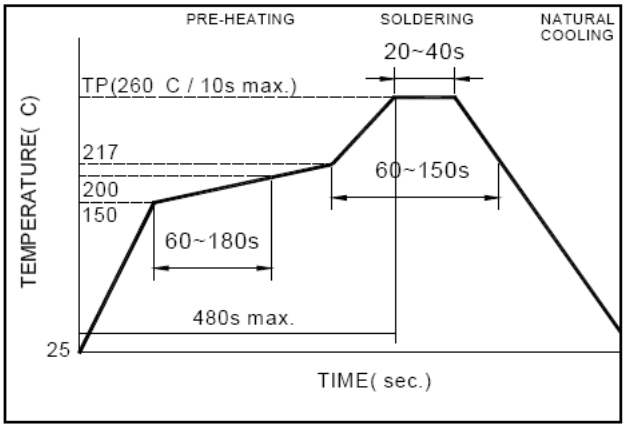


Q vs. Frequency Characteristics



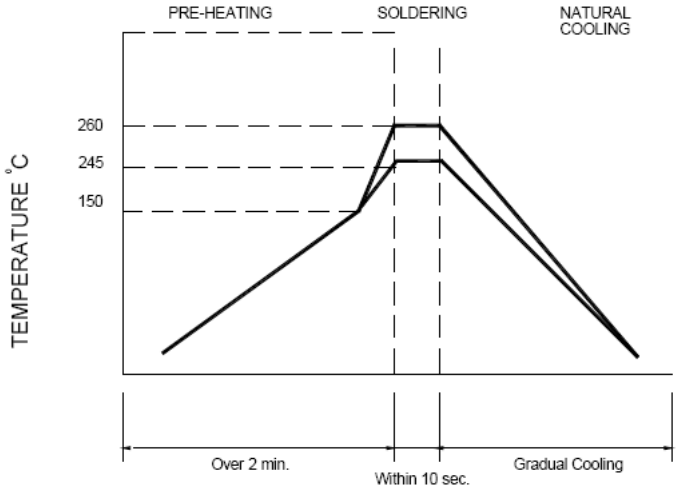
◆Soldering Conditions

Figure 1. Re-flow Soldering (Lead Free)



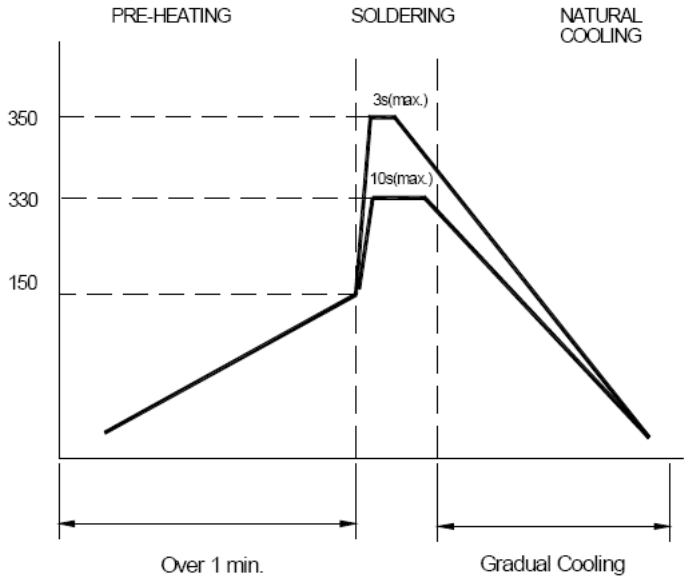
Note:
- Preheat circuit and products to 150℃
- 280℃ tip temperature (max)

Figure 2. Wave Soldering



Note：
- Never contact the ceramic with the iron tip
- 1.0mm tip diameter (max)

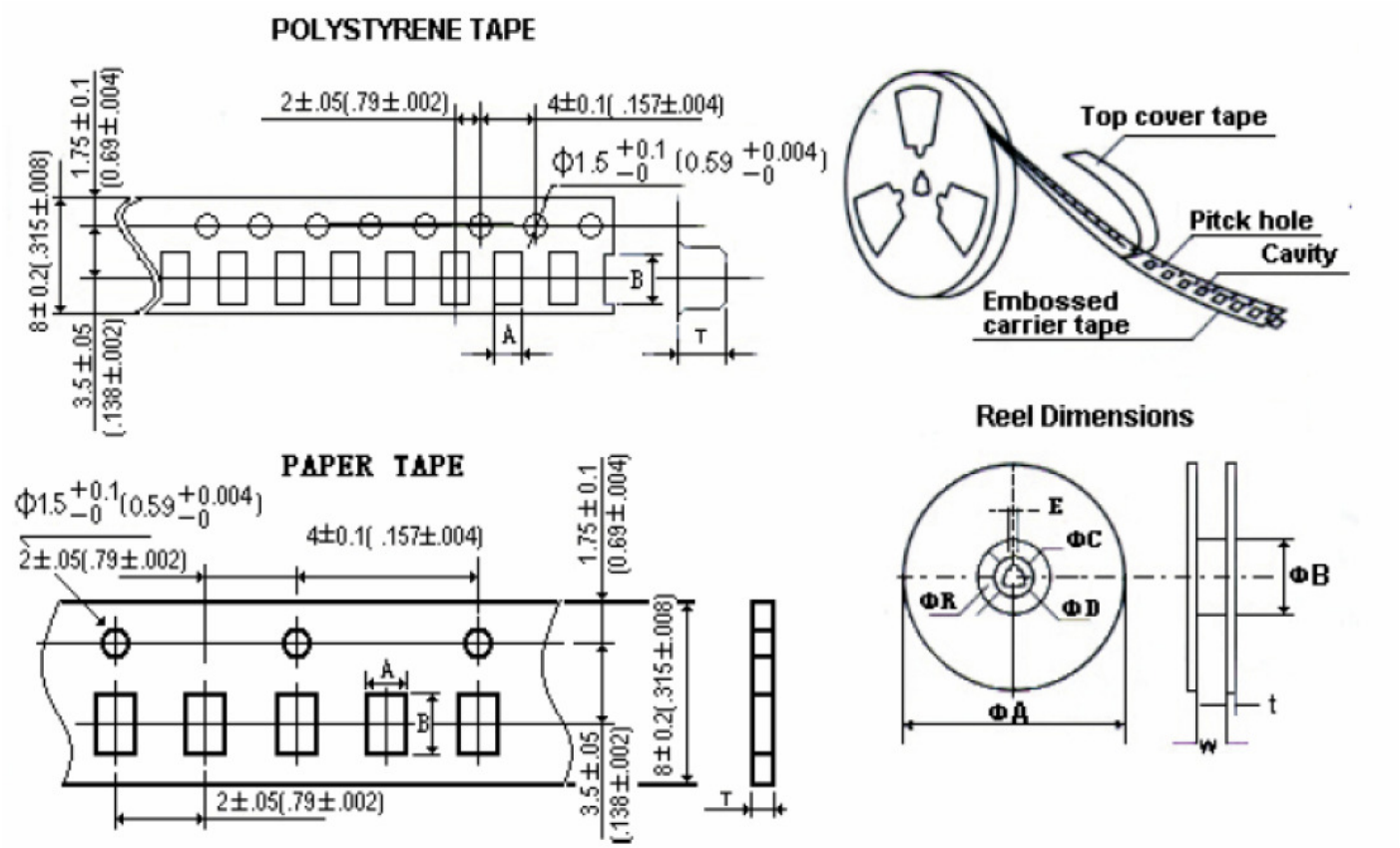
Figure 3. Hand Soldering



Note:
- Use a 20 watt soldering iron with tip diameter of 1.0mm
- Limit soldering time to 3 sec.

◆ Packaging Style

1、Tape



		A	B	T
纸带	0402	0.74	1.23	0.60
胶带	0603	1.15	1.83	0.95
	0805	1.85	2.40	1.45
	1008	2.73	2.90	2.34
	1210	2.96	3.60	2.40
	1812	3.22	4.82	3.15

unit:(mm)

unit	ΦA	ΦB	ΦC	ΦD	E	W	t	R
mm	178	60	13	21	2	10	2	1
	330	75	13	23	2	12	2	1

2、Packaging Quantity

Dimension	1005 (0402)	1608 (0603)	2012 (0805)	2520 (1008)	3225 (1210)	4532 (1812)
Quantity(Pcs)	10000	4000	2000	2000	2000	2000