



CUSTOMER : STD
PRODUCTS : High Frequency Multilayer Chip Inductors
PART NO : MCCH Series
CUST P/ NO :
DATE : 2025.04.16
SALES DEP :
E-MAIL :

VERSION : REV.A
CHANGE PROJECT : -
BEFORE : -
AFTER : -
CHANGE DATE : -
CUSTOMER SIGNATURE : -

APPROVAL BY :	CHECK BY :	DRAWN BY :
Honey Wei	Leo Wang	May Gao



MCCH Series



- Chip Hight Frequency Inductors
- Operating Temperature up tp $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- High Current up to 600mA
- Low DCR down to 6.0mOhms
- Environmental Lead free
- Environmental RoHS2.0 compliant
- Environmental halogen free
- Storage Temperature : $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Packaging 7"Reel, Plastic tape: 8 mm wide

FEATURES

- Monolithic structure.
- Closed magnetic circuit avoids crosstalk.
- Suitable for flow and reflow soldering.
- Shapes and dimensions follow E.I.A. SPEC.
- Available in various sizes.
- Excellent soldering ability and heat resistance.

Applications

- Wireless communications,cellular phone,cordless phone,pager,etc.
- Miscellaneous high-frequency circuits.EMI countermeasure
- n high-frequency circuits.

PRODUCT IDENTIFICATION

MC CH 1005 Z 2N2 S
① ② ③ ④ ⑤ ⑥

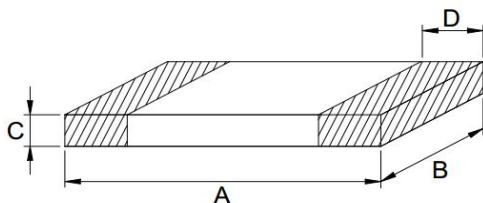
- ① Brand & Product classification
- ② Product Series NO.(CH: Chip Inductors)
- ③ External Dimensions.(1005 : L:1.0 × W:0.5 × H:0.5) [mm]
- ④ Separator code.
- ⑤ Nominal Inductance

Example	Nominal Value
1N0	1.0 nH
1N1	1.1 nH
3N3	3.3 nH
15N	15nH
R10	100nH

- ⑥ Inductance Tolerance.(B : $\pm 0.1\text{nH}$, S : $\pm 0.3\text{nH}$, D: $\pm 0.5\text{nH}$, J: $\pm 5\%$, K: $\pm 10\%$,M: $\pm 20\%$)

Mechanical & Dimensions

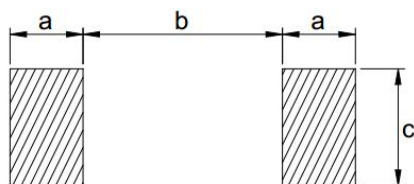
(Unit: mm)



Code	Dimensions
A	0.60 ± 0.03
B	0.30 ± 0.03
C	0.30 ± 0.03
D	0.15 ± 0.05

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	0.25~0.30
b	0.20~0.30
c	0.25~0.40

Electrical Characteristics

Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH0603Z0N6 □	0.6	13	0.08	600	10000	500
MCCH0603Z0N7 □	0.7	13	0.10	600	10000	500
MCCH0603Z0N8 □	0.8	13	0.10	600	10000	500
MCCH0603Z0N9 □	0.9	13	0.10	600	10000	500
MCCH0603Z1N0 □	1.0	13	0.15	600	10000	500
MCCH0603Z1N1 □	1.1	13	0.15	550	10000	500
MCCH0603Z1N2 □	1.2	13	0.15	550	10000	500
MCCH0603Z1N3 □	1.3	13	0.15	550	10000	500
MCCH0603Z1N4 □	1.4	13	0.15	550	10000	500
MCCH0603Z1N5 □	1.5	13	0.15	550	10000	500
MCCH0603Z1N6 □	1.6	13	0.15	500	10000	500
MCCH0603Z1N7 □	1.7	13	0.20	500	10000	500
MCCH0603Z1N8 □	1.8	13	0.20	500	9000	500
MCCH0603Z2N0 □	2.0	13	0.25	400	8500	500
MCCH0603Z2N2 □	2.2	13	0.25	400	7500	500

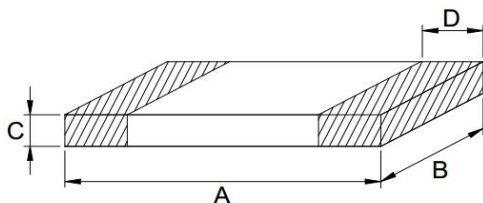
Note:

1. Inductance is measured at 50 mV.

2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

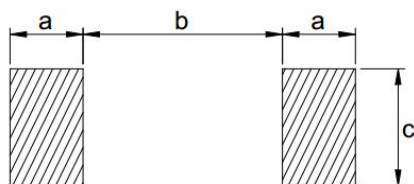
(Unit: mm)



Code	Dimensions
A	0.60 ± 0.03
B	0.30 ± 0.03
C	0.30 ± 0.03
D	0.15 ± 0.05

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	0.25~0.30
b	0.20~0.30
c	0.25~0.40

Electrical Characteristics

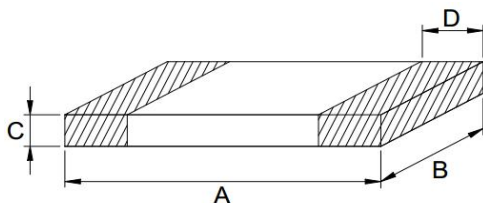
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH0603Z2N4 □	2.4	13	0.25	300	7500	500
MCCH0603Z2N6 □	2.6	13	0.25	300	7500	500
MCCH0603Z2N7 □	2.7	13	0.25	300	7500	500
MCCH0603Z2N8 □	2.8	13	0.25	300	7500	500
MCCH0603Z3N0 □	3.0	13	0.25	300	7500	500
MCCH0603Z3N3 □	3.3	13	0.32	300	7500	500
MCCH0603Z3N6 □	3.6	13	0.35	300	6500	500
MCCH0603Z3N9 □	3.9	13	0.35	300	6500	500
MCCH0603Z4N3 □	4.3	13	0.45	300	6000	500
MCCH0603Z4N7 □	4.7	13	0.45	300	6000	500
MCCH0603Z5N1 □	5.1	13	0.45	250	5500	500
MCCH0603Z5N6 □	5.6	13	0.45	250	5000	500
MCCH0603Z6N2 □	6.2	13	0.50	250	5000	500
MCCH0603Z6N8 □	6.8	13	0.50	250	4500	500
MCCH0603Z7N5 □	7.5	13	0.50	200	4000	500

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

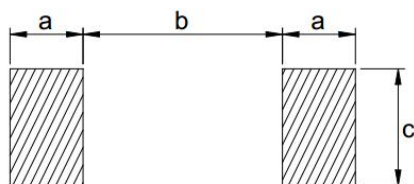
(Unit: mm)



Code	Dimensions
A	0.60 ± 0.03
B	0.30 ± 0.03
C	0.30 ± 0.03
D	0.15 ± 0.05

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	0.25~0.30
b	0.20~0.30
c	0.25~0.40

Electrical Characteristics

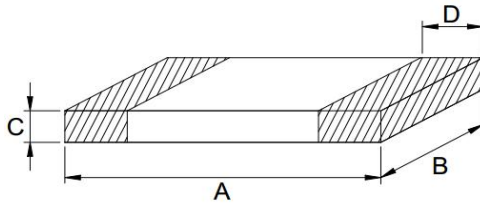
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH0603Z8N2 □	8.2	13	0.56	200	4000	500
MCCH0603Z9N1 □	9.1	13	0.72	200	4000	500
MCCH0603Z10N □	10.0	13	0.80	200	4000	500
MCCH0603Z12N □	12.0	13	0.80	180	3500	500
MCCH0603Z15N □	15.0	13	0.85	180	3200	500
MCCH0603Z18N □	18.0	13	1.00	150	3000	500
MCCH0603Z20N □	20.0	13	1.10	150	2200	500
MCCH0603Z22N □	22.0	13	1.20	150	2200	500
MCCH0603Z27N □	27.0	13	1.60	120	2200	500
MCCH0603Z33N □	33.0	12	2.20	110	1800	300
MCCH0603Z36N □	36.0	12	2.20	110	1700	300
MCCH0603Z39N □	39.0	12	2.30	100	1600	300
MCCH0603Z43N □	43.0	12	2.40	100	1600	300
MCCH0603Z47N □	47.0	12	2.60	100	1500	300
MCCH0603Z56N □	56.0	12	2.80	80	1200	300

Note:

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Mechanical & Dimensions

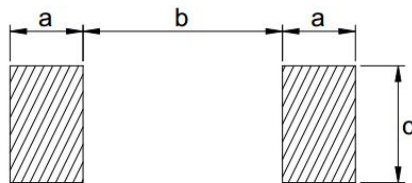
(Unit: mm)



Code	Dimensions
A	1.00 ± 0.15
B	0.50 ± 0.15
C	0.50 ± 0.15
D	0.25 ± 0.10

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	0.55 Ref
b	0.40 Ref
c	0.55 Ref

Electrical Characteristics

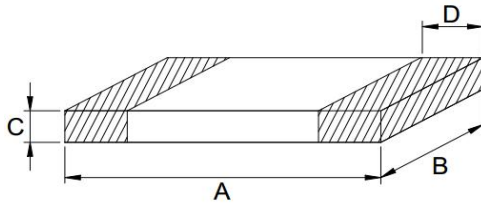
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH1005Z1N0□	1.0	8	0.10	400	10000	100
MCCH1005Z1N1□	1.1	8	0.10	400	10000	100
MCCH1005Z1N2□	1.2	8	0.10	400	10000	100
MCCH1005Z1N3□	1.3	8	0.10	400	10000	100
MCCH1005Z1N5□	1.5	8	0.10	300	6000	100
MCCH1005Z1N6□	1.6	8	0.12	300	6000	100
MCCH1005Z1N8□	1.8	8	0.12	300	6000	100
MCCH1005Z2N0□	2.0	8	0.20	300	6000	100
MCCH1005Z2N2□	2.2	8	0.20	300	6000	100
MCCH1005Z2N4□	2.4	8	0.20	300	6000	100
MCCH1005Z2N7□	2.7	8	0.20	300	6000	100
MCCH1005Z3N0□	3.0	8	0.20	300	6000	100
MCCH1005Z3N3□	3.3	8	0.20	300	6000	100
MCCH1005Z3N6□	3.6	8	0.20	300	4000	100
MCCH1005Z3N9□	3.9	8	0.20	300	4000	100
MCCH1005Z4N3□	4.3	8	0.20	300	4000	100

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

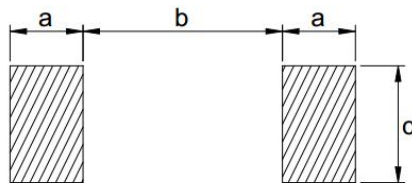
(Unit: mm)



Code	Dimensions
A	1.00 ± 0.15
B	0.50 ± 0.15
C	0.50 ± 0.15
D	0.25 ± 0.10

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	0.55 Ref
b	0.40 Ref
c	0.55 Ref

Electrical Characteristics

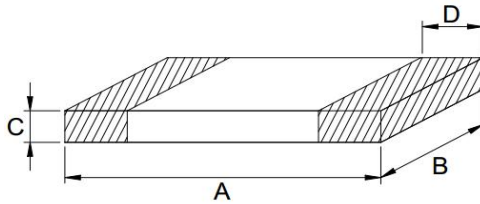
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH1005Z4N7 □	4.7	8	0.25	300	4000	100
MCCH1005Z5N1 □	5.1	8	0.25	300	4000	100
MCCH1005Z5N6 □	5.6	8	0.25	300	4000	100
MCCH1005Z6N2 □	6.2	8	0.30	300	3900	100
MCCH1005Z6N8 □	6.8	8	0.30	300	3900	100
MCCH1005Z7N5 □	7.5	8	0.40	300	3700	100
MCCH1005Z8N2 □	8.2	8	0.40	300	3600	100
MCCH1005Z9N1 □	9.1	8	0.40	300	3400	100
MCCH1005Z10N □	10.0	8	0.40	300	3200	100
MCCH1005Z12N □	12.0	8	0.50	300	2700	100
MCCH1005Z15N □	15.0	8	0.50	300	2300	100
MCCH1005Z18N □	18.0	8	0.60	300	2100	100
MCCH1005Z20N □	20.0	8	0.60	300	2000	100
MCCH1005Z22N □	22.0	8	0.60	300	1900	100
MCCH1005Z27N □	27.0	8	0.70	300	1600	100

Note:

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2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

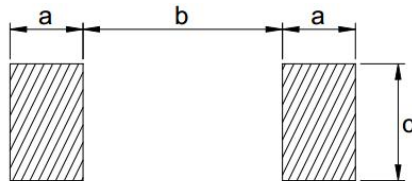
(Unit: mm)



Code	Dimensions
A	1.00 ± 0.15
B	0.50 ± 0.15
C	0.50 ± 0.15
D	0.25 ± 0.10

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	0.55 Ref
b	0.40 Ref
c	0.55 Ref

Electrical Characteristics

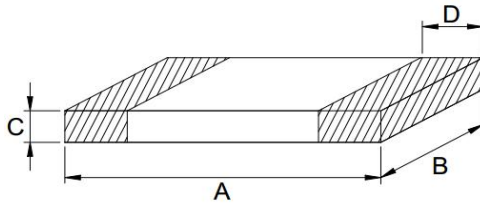
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH1005Z33N□	33.0	8	0.80	200	1300	100
MCCH1005Z39N□	39.0	8	1.00	200	1200	100
MCCH1005Z43N□	43.0	8	1.10	200	1100	100
MCCH1005Z47N□	47.0	8	1.10	200	1000	100
MCCH1005Z56N□	56.0	8	1.20	200	750	100
MCCH1005Z68N□	68.0	8	1.40	180	750	100
MCCH1005Z82N□	82.0	8	2.40	150	750	100
MCCH1005ZR10□	100.0	8	2.60	150	700	100
MCCH1005ZR12□	120.0	8	2.80	150	600	100
MCCH1005ZR15□	150.0	8	3.20	100	550	100
MCCH1005ZR18□	180.0	8	3.70	100	500	100
MCCH1005ZR22□	220.0	8	4.00	100	450	100
MCCH1005ZR27□	270.0	8	4.50	100	400	100
MCCH1005ZR33□	330.0	6	7.00	50	350	50
MCCH1005ZR36□	360.0	6	7.50	50	300	50

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

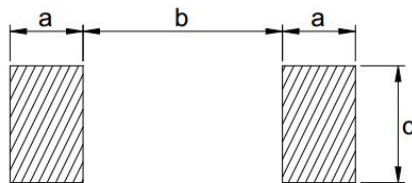
(Unit: mm)



Code	Dimensions
A	1.60 ± 0.20
B	0.80 ± 0.20
C	0.80 ± 0.20
D	0.30 ± 0.20

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	1.00 Ref
b	0.60 Ref
c	0.80 Ref

Electrical Characteristics

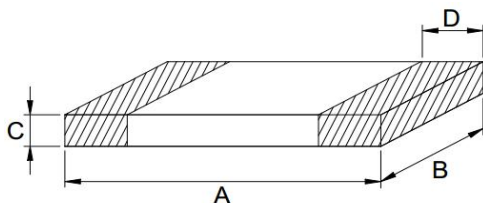
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH1608Z1N0□	1.0	8	0.05	500	10000	100
MCCH1608Z1N2□	1.2	8	0.05	500	10000	100
MCCH1608Z1N5□	1.5	8	0.10	500	6000	100
MCCH1608Z1N8□	1.8	8	0.10	500	6000	100
MCCH1608Z2N0□	2.0	8	0.10	500	6000	100
MCCH1608Z2N2□	2.2	8	0.10	500	6000	100
MCCH1608Z2N4□	2.4	8	0.12	500	6000	100
MCCH1608Z2N7□	2.7	10	0.12	500	6000	100
MCCH1608Z3N3□	3.3	10	0.15	500	6000	100
MCCH1608Z3N6□	3.6	10	0.16	500	6000	100
MCCH1608Z3N9□	3.9	10	0.16	500	6000	100
MCCH1608Z4N3□	4.3	10	0.18	500	6000	100
MCCH1608Z4N7□	4.7	10	0.20	500	6000	100
MCCH1608Z5N1□	5.1	10	0.25	500	5500	100
MCCH1608Z5N6□	5.6	10	0.25	500	5000	100

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

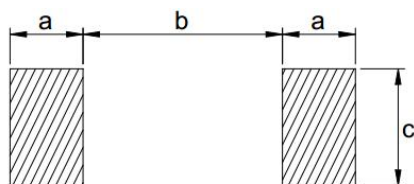
(Unit: mm)



Code	Dimensions
A	1.60 ± 0.20
B	0.80 ± 0.20
C	0.80 ± 0.20
D	0.30 ± 0.20

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	1.00 Ref
b	0.60 Ref
c	0.80 Ref

Electrical Characteristics

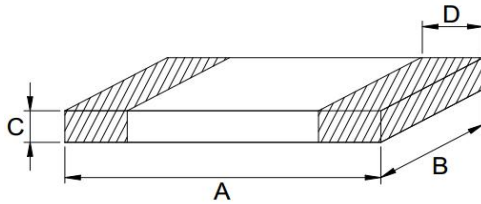
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH1608Z6N8 □	6.8	10	0.30	500	5000	100
MCCH1608Z7N5 □	7.5	10	0.35	500	4500	100
MCCH1608Z8N2 □	8.2	10	0.35	500	4500	100
MCCH1608Z9N1 □	9.1	10	0.40	500	3500	100
MCCH1608Z10N □	10.0	12	0.40	300	3500	100
MCCH1608Z12N □	12.0	12	0.45	300	3000	100
MCCH1608Z15N □	15.0	12	0.50	300	2300	100
MCCH1608Z18N □	18.0	12	0.55	300	2200	100
MCCH1608Z22N □	22.0	12	0.60	300	2000	100
MCCH1608Z24N □	24.0	12	0.60	300	2000	100
MCCH1608Z27N □	27.0	12	0.65	300	1700	100
MCCH1608Z33N □	33.0	12	0.70	300	1500	100
MCCH1608Z36N □	36.0	12	0.70	300	1400	100
MCCH1608Z39N □	39.0	12	0.70	300	1400	100
MCCH1608Z47N □	47.0	12	0.70	300	1200	100

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

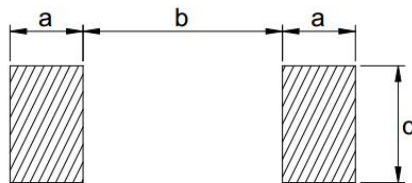
(Unit: mm)



Code	Dimensions
A	1.60 ± 0.20
B	0.80 ± 0.20
C	0.80 ± 0.20
D	0.30 ± 0.20

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	1.00 Ref
b	0.60 Ref
c	0.80 Ref

Electrical Characteristics

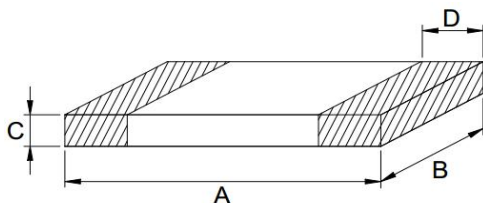
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH1608Z56N □	56.0	12	0.75	300	1100	100
MCCH1608Z68N □	68.0	12	0.85	300	900	100
MCCH1608Z82N □	82.0	8	1.00	300	800	100
MCCH1608ZR10 □	100.0	8	1.20	300	700	100
MCCH1608ZR12 □	120.0	8	1.40	200	600	50
MCCH1608ZR15 □	150.0	8	1.60	200	500	50
MCCH1608ZR18 □	180.0	8	1.90	200	400	50
MCCH1608ZR22 □	220.0	8	2.40	200	350	50
MCCH1608ZR27 □	270.0	8	2.60	150	350	50
MCCH1608ZR33 □	330.0	8	2.80	150	350	50
MCCH1608ZR39 □	390.0	8	3.20	150	300	50
MCCH1608ZR43 □	430.0	8	3.40	150	280	50
MCCH1608ZR47 □	470.0	8	3.60	150	250	50

Note:

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Mechanical & Dimensions

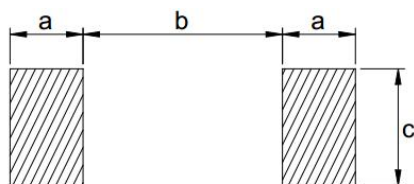
(Unit: mm)



Code	Dimensions
A	2.0 ± 0.20
B	1.2 ± 0.20
C	0.9 ± 0.20
D	0.5 ± 0.30

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	1.00 Ref
b	1.00 Ref
c	1.00 Ref

Electrical Characteristics

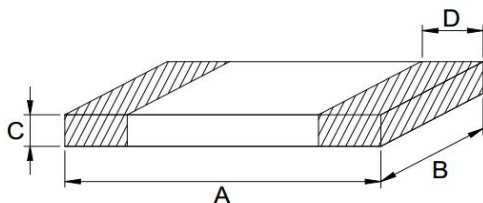
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH2012Z1N5□	1.5	10	0.10	500	6000	100
MCCH2012Z1N8□	1.8	10	0.10	500	6000	100
MCCH2012Z2N2□	2.2	10	0.10	500	6000	100
MCCH2012Z2N7□	2.7	12	0.10	500	5500	100
MCCH2012Z3N3□	3.3	12	0.13	500	5000	100
MCCH2012Z3N9□	3.9	12	0.15	500	4500	100
MCCH2012Z4N7□	4.3	12	0.20	500	4000	100
MCCH2012Z4N7□	4.7	12	0.20	500	4000	100
MCCH2012Z5N6□	5.6	15	0.23	500	3500	100
MCCH2012Z6N8□	6.8	15	0.25	500	3000	100
MCCH2012Z8N2□	8.2	15	0.28	500	2500	100
MCCH2012Z10N□	10.0	15	0.30	500	2200	100
MCCH2012Z12N□	12.0	15	0.35	500	2000	100
MCCH2012Z15N□	15.0	15	0.40	500	1800	100
MCCH2012Z18N□	18.0	15	0.45	300	1600	100

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

Mechanical & Dimensions

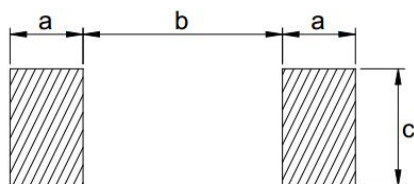
(Unit: mm)



Code	Dimensions
A	2.0 ± 0.20
B	1.2 ± 0.20
C	0.9 ± 0.20
D	0.5 ± 0.30

Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
a	1.00 Ref
b	1.00 Ref
c	1.00 Ref

Electrical Characteristics

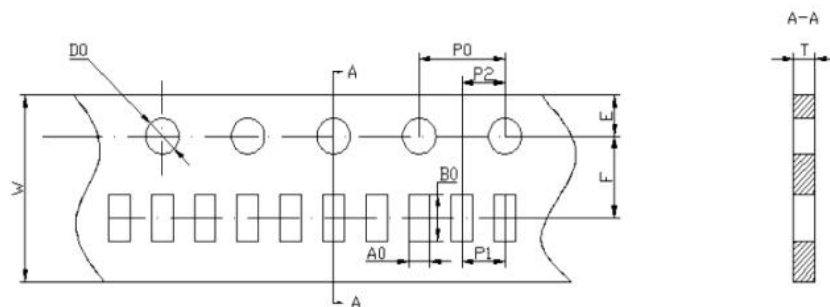
Part Number	Inductance ¹ (nH)	Q (min)	DCR ² (Ω) Max	Rated Current (mA)Max	SRF(MHz) Min.	Test Frequency
MCCH2012Z22N□	22.0	15	0.50	300	1500	100
MCCH2012Z27N□	27.0	15	0.55	300	1400	100
MCCH2012Z33N□	33.0	15	0.60	300	1300	100
MCCH2012Z39N□	39.0	15	0.65	300	1100	100
MCCH2012Z43N□	43.0	18	0.70	300	1000	100
MCCH2012Z47N□	47.0	18	0.70	300	1000	100
MCCH2012Z56N□	56.0	18	0.75	300	900	100
MCCH2012Z68N□	68.0	18	0.80	300	850	100
MCCH2012Z82N□	82.0	18	0.90	300	800	100
MCCH2012ZR10□	100.0	18	0.90	300	700	100
MCCH2012ZR12□	120.0	13	0.95	300	600	50
MCCH2012ZR15□	150.0	13	1.20	300	550	50
MCCH2012ZR18□	180.0	13	1.30	300	500	50
MCCH2012ZR22□	220.0	12	1.50	300	400	50
MCCH2012ZR27□	270.0	12	1.80	300	350	50
MCCH2012ZR33□	330.0	12	2.00	300	300	50
MCCH2012ZR39□	390.0	10	2.00	300	250	50
MCCH2012ZR47□	470.0	10	2.00	300	200	50

Note:

1. Inductance is measured at 50 mV.
2. The nominal DCR is measured at 20°C ambient temperature.

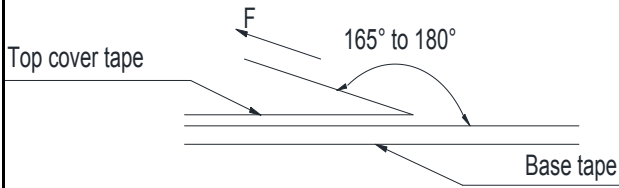
Packaging

Tape Dimension:
Paper tape

[illegible]

Packaging

Tearing Off Force:



The force tearing off cobe tape is 10 to 130 g.f in the arrow direction under the following conditions			
Room Temp (°C)	Room Humidity (%)	Room atrn (hPa)	Teaming Speed (mm/min)
5~35	45~85	860~1060	300

※Storage Conditions

1. Temperature and humidity conditions:
-40°C ~ +85°C and 70% RH.
2. Recommended products should be used within 6 months form the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.

※Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

Recommended Soldering Conditions

Figure 1. Re-flow Soldering

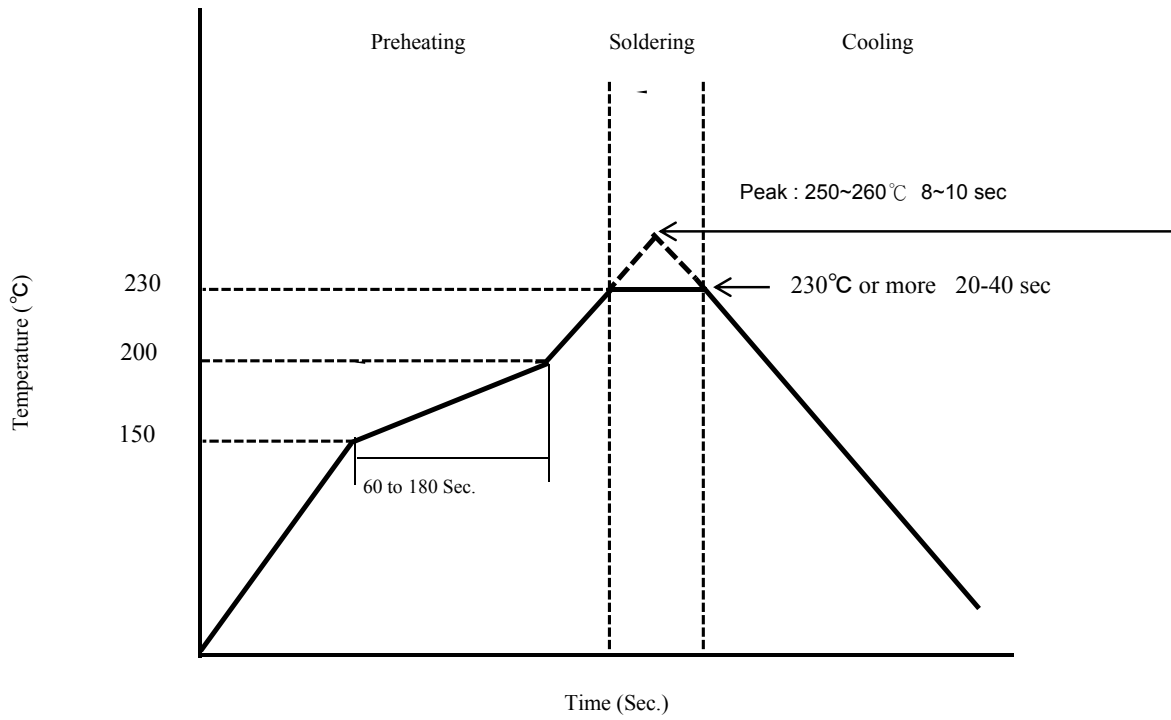
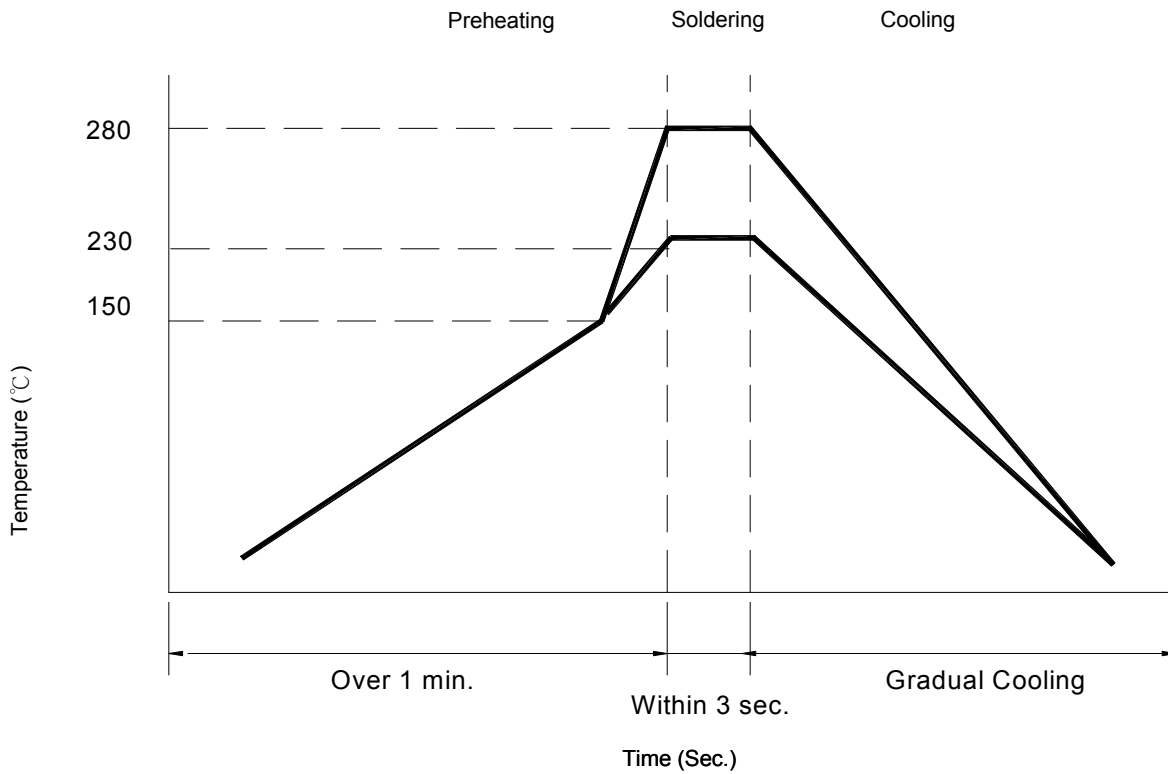


Figure 2. Hand Soldering



Reliability and Testing Conditions

Item	Specification	Conditions															
Operating temperature range	MCCH1005 and MCCH0603 -55℃ ~ +125℃ (Including self-temperature rise) MCCH1608 and MCCH2012 -40℃ ~ +85℃(Including self-temperature rise)'																
Storage temperature and humidity range	-40℃ ~ +85℃ , 70% RH Max																
Solderability	More than 90% of the terminal electrode should be covered with solder.	- Preheat: 150 ℃ , 60 sec - Solder: Sn96.5%-Ag3%-Cu0.5% - Temperature: 245±5℃ - Flux for lead free: Rosin 9.5% - Dip time: 4±1 sec - Depth: completely cover the termination															
Resistance to Soldering Heat	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	- Solder technique simulation: SMD - Temperature (℃): 260 ± 5 (solder temp) - Time (s): 10 ± 1 - Temperature ramp / immersion and emersion rate: 25 mm/s ± 6 mm/s - Number of heat cycles: 1															
Resistance to High Temperature	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 125±5℃and 24 hour drying under normal condition.															
Resistance to Low Temperature	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in -55±2℃ and 24 hour drying under normal condition.															
Resistance to Humidity	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 60±2℃, 90~95%RH, and 24 hour drying under normal condition.															
Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 30 cycles of following condition. <table border="1"> <thead> <tr> <th>Step</th><th>Temperature (℃)</th><th>Times (min.)</th></tr> </thead> <tbody> <tr> <td>1</td><td>-55±2℃</td><td>30</td></tr> <tr> <td>2</td><td>Room Temperature</td><td>Within 3</td></tr> <tr> <td>3</td><td>125±5℃</td><td>30</td></tr> <tr> <td>4</td><td>Room Temperature</td><td>Within 3</td></tr> </tbody> </table>	Step	Temperature (℃)	Times (min.)	1	-55±2℃	30	2	Room Temperature	Within 3	3	125±5℃	30	4	Room Temperature	Within 3
Step	Temperature (℃)	Times (min.)															
1	-55±2℃	30															
2	Room Temperature	Within 3															
3	125±5℃	30															
4	Room Temperature	Within 3															
Vibration Test	Inductance within ±10% of initial value and appearance shall not break.	After vibration for 1hour, In each of three orientations at sweep vibration (10~55~10Hz) with 1.52mm P-P Amplitudes.															
Terminal strength	The terminal electrode and must not be damaged	Solder a chip to test substrate, and then laterally apply a force(0603:2N,1005/1608:5N, 2012:10N) in the arrow direction, Duration :5s 															
Drop Test	Inductance within ±10% of initial value and appearance shall not break.	Drop 3 times on a concrete floor from a height of 75cm															