



**MORE**<sup>®</sup> | 茂昌电子  
CHANCE

**CUSTOMER :** STD  
**PRODUCTS :** High Current SMD Power Inductor  
**PART NO :** MCPG Series  
**CUST P/ NO :**  
**DATE :** 2023.4.18  
**SALES DEP :**  
**E-MAIL :**

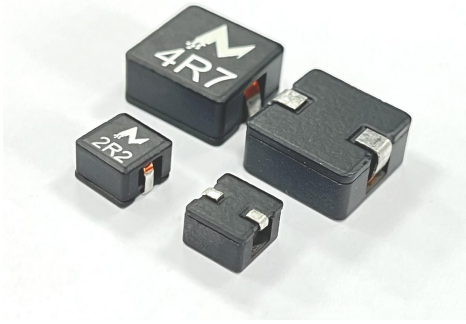
**VERSION :** REV.A  
**CHANGE PROJECT :** -  
**BEFORE :** -  
**AFTER :** -  
**CHANGE DATE :** -  
**CUSTOMER SIGNATURE :** -

<b>APPROVAL BY :</b>	<b>CHECK BY :</b>	<b>DRAWN BY :</b>
<i>Honey Wei</i>	<i>Leo Wang</i>	<i>Lan</i>





## MCPG Series



- SHIELDED SMD POWER INDUCTOR
- Operating Temperature up to  $-55\text{ }^{\circ}\text{C} \sim 125\text{ }^{\circ}\text{C}$
- High Current up to 65 A
- Low DCR down to 0.35mOhms
- Environmental Lead free
- Environmental RoHS2.0 compliant
- Environmental halogen free
- Storage Temperature :  $-55\text{ }^{\circ}\text{C} \sim +85\text{ }^{\circ}\text{C}$
- Packaging 13"Reel, Plastic tape: 12/16/24/32/44 mm width

## FEATURES

- Compact size using flat wire, and SMD type.
- Low radiation noise by magnetically shielded construction.
- High current, Low resistance.

## Applications

- High efficiency DC/DC converters.
- Single and polyphase buck converters.
- Filter for audio applications.
- Optimized for high current boost applications.
- Laptops, Graphic cards, Motherboards.

## PRODUCT IDENTIFICATION

MC      PG      0430      Z      1R0      M  
 ①          ②          ③          ④          ⑤          ⑥

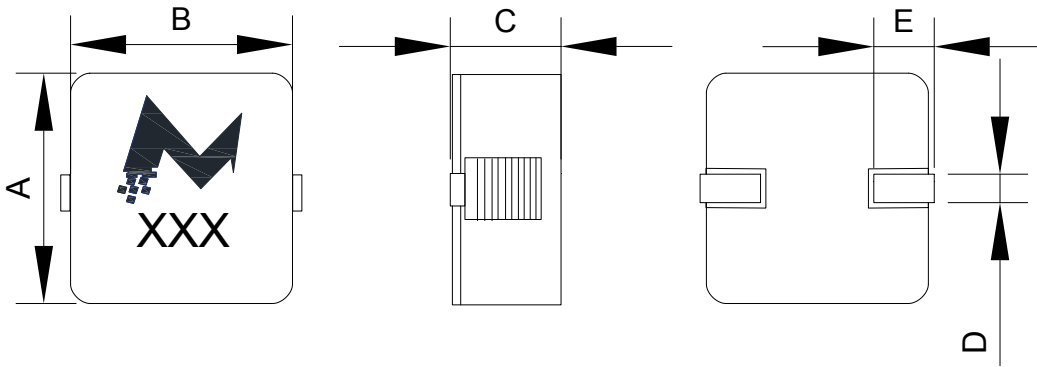
- ① Brand & Product classification.
- ② Product Series NO.
- ③ External Dimensions.
- ④ Separator code.
- ⑤ Inductance. ( Exp. 1.0 uH = 1R0 )

Example	Nominal Value
1R0	1.0uH
1R2	1.2uH
1R5	1.5uH
2R2	2.2uH

- ⑥ Inductance Tolerance. (K:  $\pm 10\%$  ; M:  $\pm 20\%$  ; N:  $\pm 30\%$ )

**Mechanical & Dimensions**

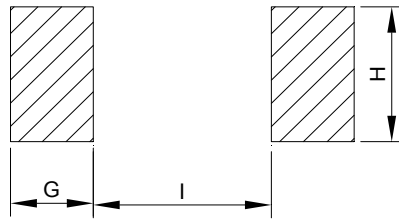
(Unit: mm)



Code	Dimensions
A	6.9 ± 0.4
B	7.0 ± 0.4
C	3.3 MAX
D	1.2 ± 0.3
E	1.8 ± 0.5

**Recommend Land Pattern Dimensions**

(Unit: mm)



Code	Dimensions
G	2.7 REF
H	2.2 REF
I	2.4 REF

**Electrical Characteristics**

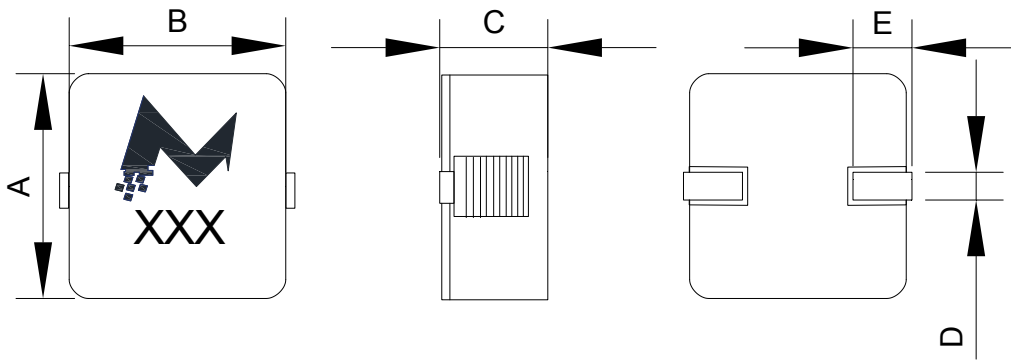
Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG2630ZR13M	0.13±20%	1.0 (0.91)	48.0	22.0		
MCPG2630ZR24M	0.24±20%	1.98 (1.8)	40.0	18.0		
MCPG2630ZR52M	0.52±20%	4.07(3.7)	20.0	14.0		
MCPG2630ZR95M	0.95±20%	6.82 (6.2)	13.0	11.0		
MCPG2630Z1R2M	1.15±20%	9.46 (8.6)	13.0	8.5		
MCPG2630Z1R5M	1.5±20%	13.97(12.7)	12.0	7.5		
MCPG2630Z2R0M	2.0±20%	15.62 (14.2)	9.0	6.5		

Note:

1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.

### Mechanical & Dimensions

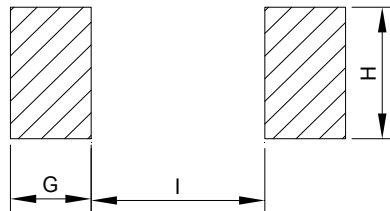
(Unit: mm)



Code	Dimensions
A	6.9 ± 0.4
B	7.0 ± 0.4
C	4.0 MAX
D	1.2 ± 0.3
E	1.8 ± 0.5

### Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
G	2.7 REF
H	2.2 REF
I	2.4 REF

### Electrical Characteristics

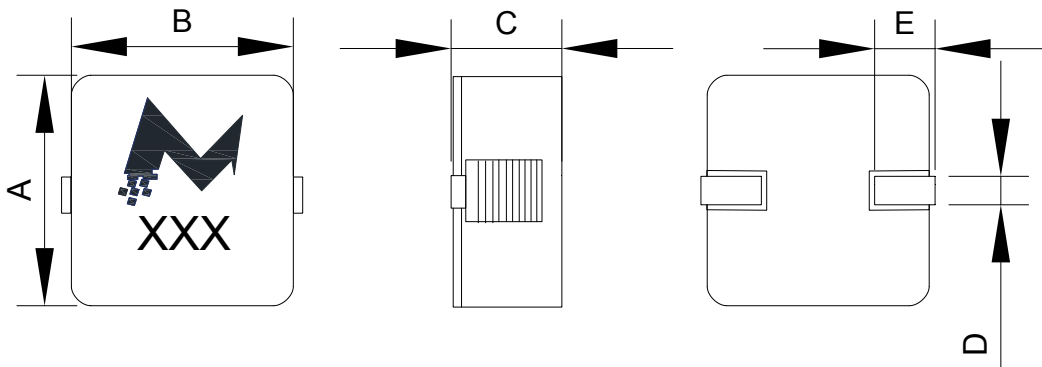
Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG2640ZR22M	0.22±20%	1.21 (1.1)	32.0	21.0		
MCPG2640ZR40M	0.40±20%	2.04 (1.85)	25.0	19.0		
MCPG2640ZR68M	0.68±20%	3.41 (3.1)	20.0	17.0		
MCPG2640Z1R0M	1.0±20%	5.06 (4.6)	19.0	15.0		
MCPG2640Z1R5M	1.5±20%	7.26 (6.6)	14.0	11.0		
MCPG2640Z2R2M	2.2±20%	12.54 (11.4)	13.0	9.0		
MCPG2640Z3R3M	3.3±20%	18.92 (17.2)	11.0	6.5		
MCPG2640Z4R7M	4.7±20%	21.45 (19.5)	7.00	6.0		

Note:

1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.

### Mechanical & Dimensions

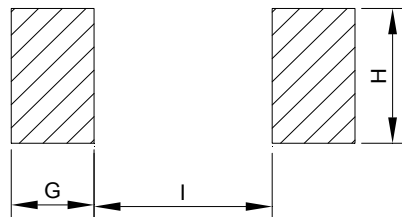
(Unit: mm)



Code	Dimensions
A	6.9 ± 0.4
B	7.0 ± 0.4
C	5.0 MAX
D	1.2 ± 0.3
E	1.8 ± 0.5

### Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
G	2.7 REF
H	2.2 REF
I	2.4 REF

### Electrical Characteristics

Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG2650ZR24M	0.24±20%	1.1 (1.0)	28.0	20.0		
MCPG2650ZR47M	0.47±20%	1.49 (1.35)	20.0	18.0		
MCPG2650ZR76M	0.76±20%	2.48 (2.25)	15.0	15.5		
MCPG2650Z1R1M	1.1±20%	3.47 (3.15)	13.0	15.0		
MCPG2650Z1R5M	1.5±20%	4.73 (4.3)	11.0	13.0		
MCPG2650Z2R0M	2.0±20%	6.44 (5.85)	9.0	11.5		
MCPG2650Z2R2M	2.2±20%	6.44 (5.85)	8.5	11.5		
MCPG2650Z3R3M	3.3±20%	9.9 (9.0)	8.0	9.0		
MCPG2650Z4R7M	4.7±20%	15.95 (14.5)	6.5	6.5		
MCPG2650Z4R9M	4.9±20%	15.95 (14.5)	6.5	6.5		
MCPG2650Z6R5M	6.5±20%	23.65 (21.5)	6.0	6.0		
MCPG2650Z7R6M	7.6±20%	33.22 (20.2)	4.8	4.2		
MCPG2650Z8R5M	8.5±20%	35.75 (32.5)	4.5	4.0		
MCPG2650Z100M	10.0±20%	36.3 (33.0)	4.0	3.5		

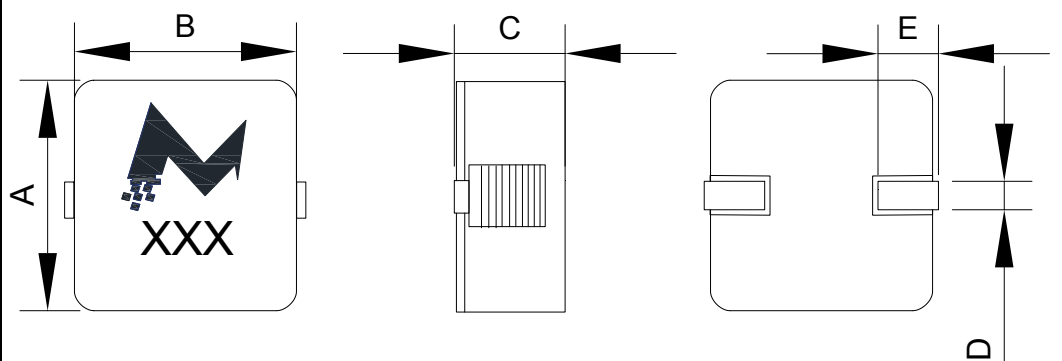
Note:

1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.



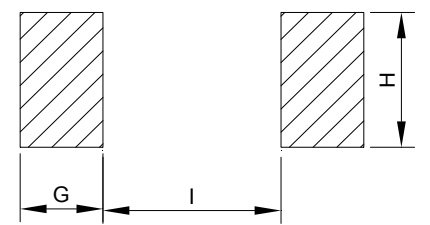
### Mechanical & Dimensions

(Unit: mm)

	Code	Dimensions
	A	10.2 ± 0.5
	B	10.5 ± 0.5
	C	4.2 MAX
	D	2.0 ± 0.5
	E	2.0 ± 0.5
		② 5.2 ± 0.040

### Recommend Land Pattern Dimensions

(Unit: mm)

	Code	Dimensions
	G	3.5 REF
	H	4.0 REF
	I	3.8 REF

### Electrical Characteristics

Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG0440ZR15M	0.15±20%	0.64 (0.58)	60.0	25.0		
MCPG0440ZR30M	0.30±20%	1.21 (1.10)	35.0	22.0		
MCPG0440ZR56M	0.56±20%	1.77 (1.61)	30.0	20.0		
MCPG0440Z1R0M	1.0±20%	3.63 (3.3)	20.0	16.0		
MCPG0440Z1R5M	1.5±20%	5.83 (5.3)	17.0	14.0		
MCPG0440Z2R2M	2.2±20%	8.03 (7.3)	13.0	11.0		
MCPG0440Z2R8M	2.8±20%	11.66 (10.6)	11.0	9.5		
MCPG0440Z4R3M	4.3±20%	15.51 (14.1)	8.0	8.0		

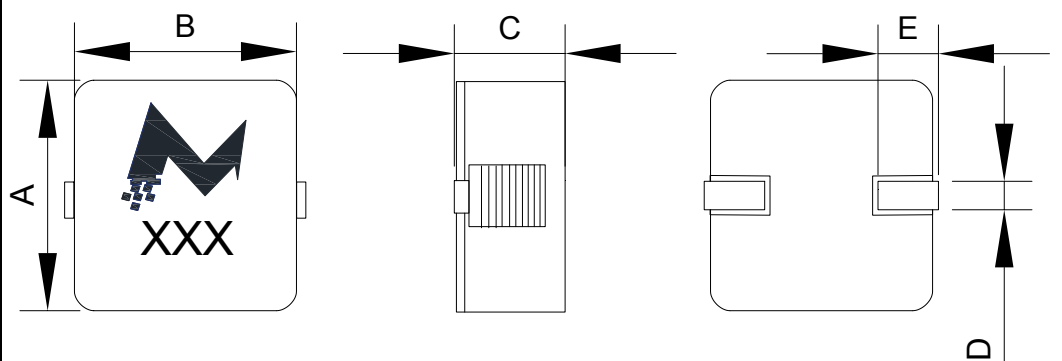
Note:

1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.



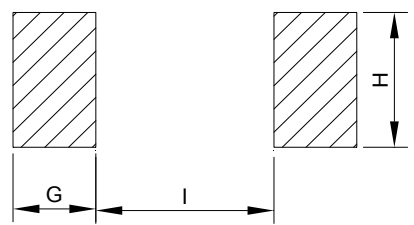
### Mechanical & Dimensions

(Unit: mm)

	Code	Dimensions
	A	10.2 ± 0.5
	B	10.5 ± 0.5
	C	5.0 MAX
	D	2.0 ± 0.5
	E	2.0 ± 0.5
		② 5.2 9.4 5.0 15.0

### Recommend Land Pattern Dimensions

(Unit: mm)

	Code	Dimensions
	G	3.5 REF
	H	4.0 REF
	I	3.8 REF

### Electrical Characteristics

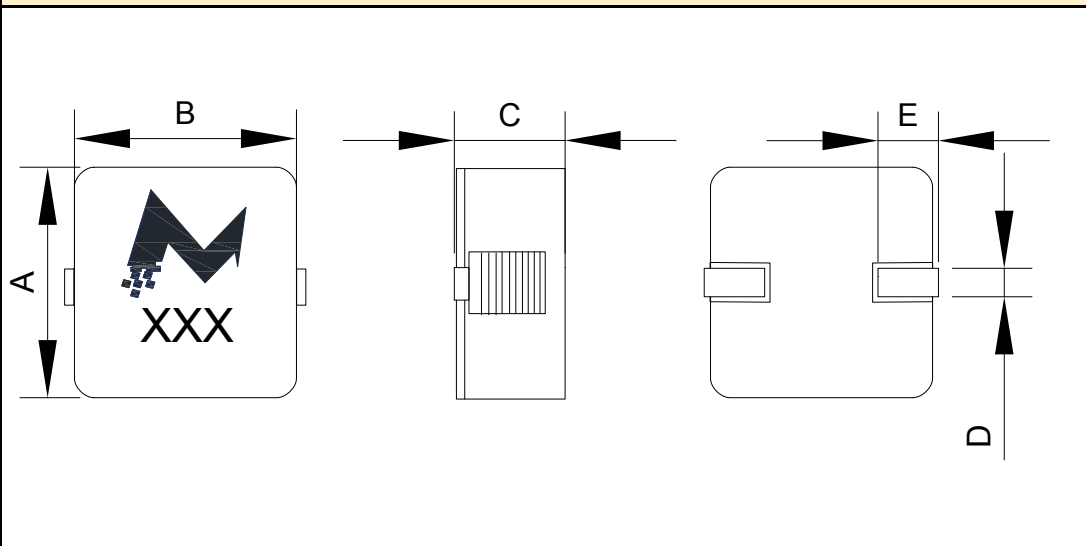
Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG0450ZR16M	0.16±20%	0.56 (0.51)	58.0	25.0		
MCPG0450ZR40M	0.40±20%	0.74 (0.67)	37.0	24.0		
MCPG0450ZR72M	0.72±20%	1.43 (1.3)	35.0	22.0		
MCPG0450Z1R2M	1.2±20%	1.98 (1.8)	25.0	20.0		
MCPG0450Z1R8M	1.8±20%	3.85 (3.5)	18.0	16.0		
MCPG0450Z2R2M	2.2±20%	5.22(4.5)	19.0	14.0		
MCPG0450Z2R4M	2.4±20%	5.23 (4.75)	17.0	14.0		
MCPG0450Z3R3M	3.3±20%	6.49 (5.9)	15.0	12.0		
MCPG0450Z4R2M	4.2±20%	7.81 (7.1)	14.0	11.0		
MCPG0450Z4R7M	4.7±20%	7.85(7.2)	12.5	11.0		
MCPG0450Z5R5M	5.5±20%	11.33 (10.3)	12.0	10.0		
MCPG0450Z6R5M	6.5±20%	13.75 (12.5)	10.0	8.4		
MCPG0450Z7R8M	7.8±20%	14.96 (13.6)	9.5	8.0		
MCPG0450Z100M	10.0±20%	17.93 (16.3)	8.5	7.2		
MCPG0450Z160M	16.0±20%	37.95 (34.5)	6.50	5.0		

Note:

1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.

### Mechanical & Dimensions

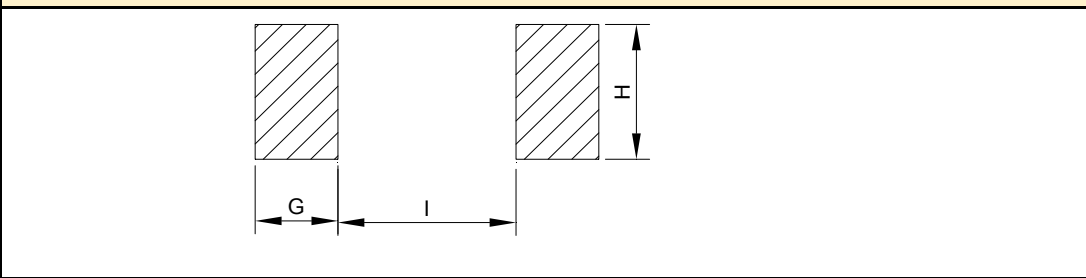
(Unit: mm)



Code	Dimensions
A	12.8 ± 0.5
B	13.0 ± 1.0
C	3.5 MAX
D	2.5 ± 0.5
E	3.0 ± 1.0

### Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
G	4.5 REF
H	5.0 REF
I	6.0 REF

### Electrical Characteristics

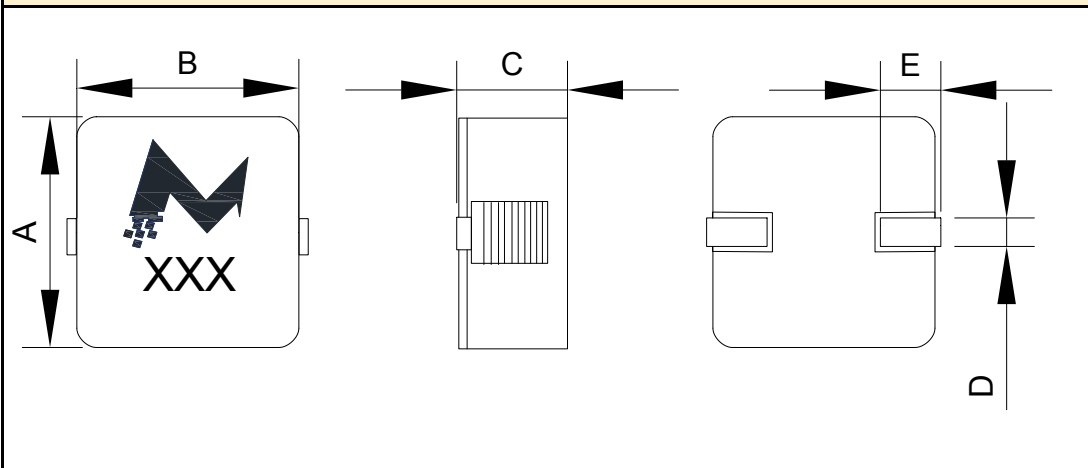
Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG0535ZR25N	0.25±30%	0.83 (0.75)	60.0	24.0		
MCPG0535ZR68M	0.68±20%	1.74 (1.58)	40.0	22.0		
MCPG0535Z1R2M	1.2±20%	3.14 (2.85)	28.0	17.0		
MCPG0535Z1R8M	1.8±20%	6.16 (5.6)	22.0	14.0		
MCPG0535Z2R4M	2.4±20%	6.27 (5.7)	18.0	14.0		
MCPG0535Z3R3M	3.3±20%	8.91 (8.1)	14.0	12.0		

- Note:
1. Inductance is measured at 100 KHz and 0.1 Vrms.
  2. The nominal DCR is measured at 25°C ambient temperature.
  3. The I-sat that will cause initial inductance value approximately 30% rolloff.
  4. The I-rms that will cause temperature rise approximate 50°C without core loss.



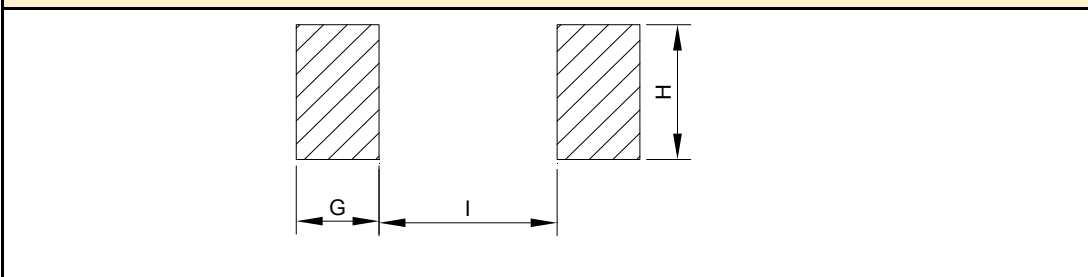
### Mechanical & Dimensions

(Unit: mm)

	Code	Dimensions
	A	12.8 ± 0.5
	B	13.0 ± 1.0
	C	6.5 MAX
	D	3.0 ± 1.0
	E	3.0 ± 1.0
MCPG0565		

### Recommend Land Pattern Dimensions

(Unit: mm)

	Code	Dimensions
	G	4.5 REF
	H	5.0 REF
	I	6.0 REF
MCPG0565		

### Electrical Characteristics

Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG0565ZR22M	0.22±20%	0.39 (0.35)	65.0	32.0		
MCPG0565ZR47M	0.47±20%	0.74 (0.67)	50.0	30.0		
MCPG0565ZR82M	0.82±20%	0.99 (0.9)	35.0	27.0		
MCPG0565Z1R3M	1.3±20%	1.98 (1.8)	25.0	25.0		
MCPG0565Z2R0M	2.0±20%	2.86 (2.6)	22.0	23.0		
MCPG0565Z2R2M	2.2±20%	2.4(2.86)	20.0	23.0		
MCPG0565Z2R8M	2.8±20%	3.63 (3.3)	17.5	20.0		
MCPG0565Z3R3M	3.3±20%	3.63 (3.3)	14.5	20.0		
MCPG0565Z3R7M	3.7±20%	5.39 (4.9)	16.0	17.0		
MCPG0565Z4R7M	4.7±20%	7.7 (7.0)	15.0	13.0		
MCPG0565Z6R0M	6.0±20%	9.24 (8.4)	14.0	12.0		
MCPG0565Z7R3M	7.3±20%	6.49 (5.9)	12.0	13.0		
MCPG0565Z9R2M	9.2±20%	8.58 (7.8)	10.5	12.0		
MCPG0565Z110M	11.3±20%	10.0 (9.1)	9.5	11.0		
MCPG0565Z130M	13.0±20%	12.32 (11.2)	9.00	10.0		
MCPG0565Z150M	15.4±20%	16.28 (14.8)	8.00	9.0		
MCPG0565Z220M	22.0±20%	27.17 (24.7)	6.50	6.0		
MCPG0565Z330M	33.0±20%	33.6 (30.5)	5.50	5.50		

Note:

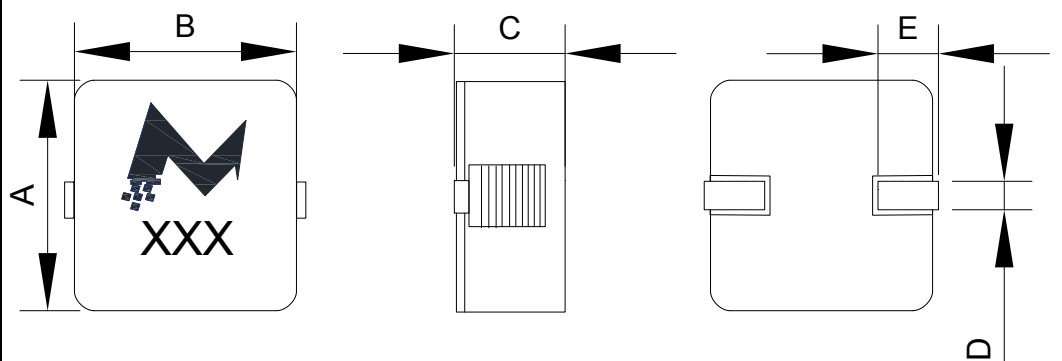
1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.





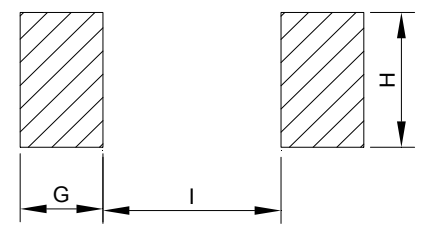
### Mechanical & Dimensions

(Unit: mm)

	Code	Dimensions
	A	18.2 ± 0.5
	B	18.3 ± 1.0
	C	9.2 MAX
	D	3.5 ± 1.5
	E	4.5 ± 1.0

### Recommend Land Pattern Dimensions

(Unit: mm)

	Code	Dimensions
	G	6.0 REF
	H	6.0 REF
	I	7.3 REF

### Electrical Characteristics

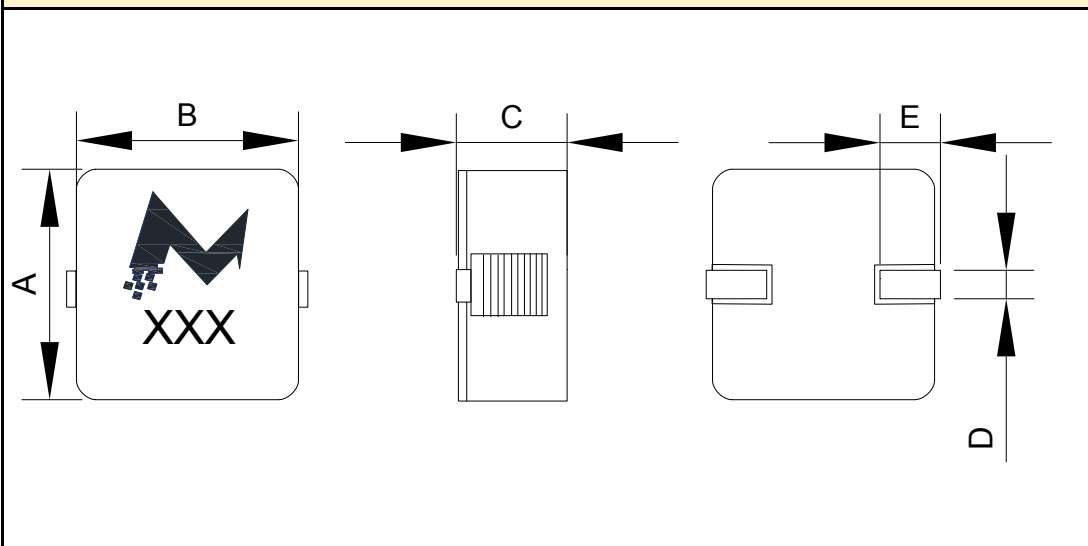
Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG0790ZR82M	0.82±20%	0.58 (0.54)	65.0	41.5		
MCPG0790Z1R3M	1.3±20%	1.02 (0.94)	62.0	34.5		
MCPG0790Z1R9M	1.9±20%	1.3 (1.2)	52.0	32.5		
MCPG0790Z2R6M	2.6±20%	1.71 (1.58)	50.0	31.5		
MCPG0790Z3R5M	3.5±20%	3.35 (3.1)	37.0	22.5		
MCPG0790Z4R5M	4.5±20%	3.67 (3.4)	37.0	20.5		
MCPG0790Z5R6M	5.6±20%	4.0 (3.7)	33.0	19.0		
MCPG0790Z6R8M	6.8±20%	4.43 (4.1)	27.0	18.5		
MCPG0790Z100M	10.0±20%	7.45 (6.9)	21.5	15.0		
MCPG0790Z100MT	10.0±20%	7.67 (7.1)	18.5	16.5		
MCPG0790Z150M	15.0±20%	10.05 (9.3)	14.0	14.0		
MCPG0790Z220M	22.0±20%	15.77 (14.6)	11.0	11.0		
MCPG0790Z330M	33.0±20%	24.41 (22.6)	9.00	8.5		
MCPG0790Z470M	47.0±20%	36.72 (34.0)	7.00	6.8		

Note:

1. Inductance is measured at 100 KHz and 0.1 Vrms.
2. The nominal DCR is measured at 25°C ambient temperature.
3. The I-sat that will cause initial inductance value approximately 30% rolloff.
4. The I-rms that will cause temperature rise approximate 50°C without core loss.

### Mechanical & Dimensions

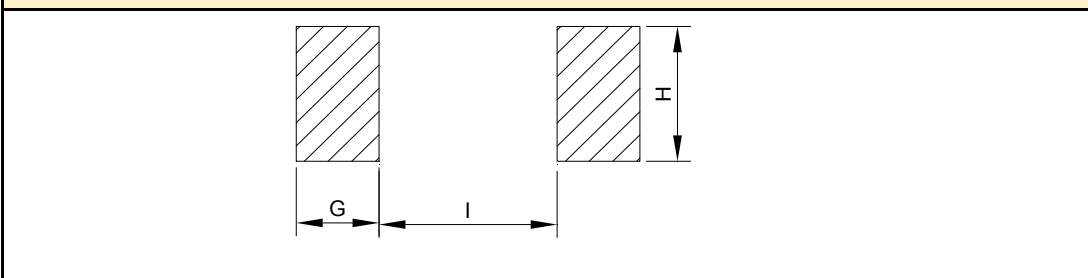
(Unit: mm)



Code	Dimensions
A	22.0 ± 1.0
B	22.5 ± 1.0
C	12.0 ± 0.4
D	3.5 ± 1.5
E	5.5 ± 1.0

### Recommend Land Pattern Dimensions

(Unit: mm)



Code	Dimensions
G	7.0 REF
H	6.0 REF
I	9.0 REF

### Electrical Characteristics

Part Number	Inductance <sup>1</sup> (μH)	DCR <sup>2</sup> (mΩ) Max(Typ)	I-sat <sup>3</sup> (Amps)Typ	I-rms <sup>4</sup> (Amps)Typ		
MCPG0912Z3R3M	3.3±20%	1.87 (1.7)	45.0	29.0		
MCPG0912Z6R8M	6.8±20%	2.31 (2.1)	31.0	28.5		
MCPG0912Z8R2M	8.2±20%	2.97 (2.7)	30.0	25.5		
MCPG0912Z100M	10.0±20%	3.74 (3.4)	26.0	21.0		
MCPG0912Z120M	12.0±20%	4.73 (4.3)	25.0	19.0		
MCPG0912Z220M	22.0±20%	7.7 (7.0)	18.0	15.0		
MCPG0912Z330M	33.0±20%	14.52 (13.2)	15.0	11.5		
MCPG0912Z470M	47.0±20%	21.12 (19.2)	12.0	9.0		
MCPG0912Z680M	68.0±20%	30.03 (27.3)	9.5	7.5		
MCPG0912Z820M	82.0±20%	33.44 (30.4)	8.5	7.0		

Note:  
 1. Inductance is measured at 100 KHz and 0.1 Vrms.  
 2. The nominal DCR is measured at 25°C ambient temperature.  
 3. The I-sat that will cause initial inductance value approximately 30% rolloff.  
 4. The I-rms that will cause temperature rise approximate 50°C without core loss.





**Packaging**

**Tape Dimension:**

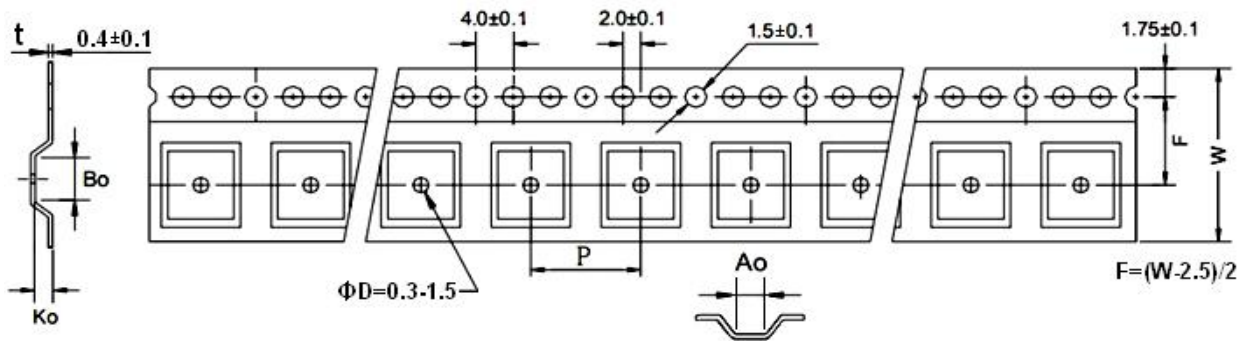


图1

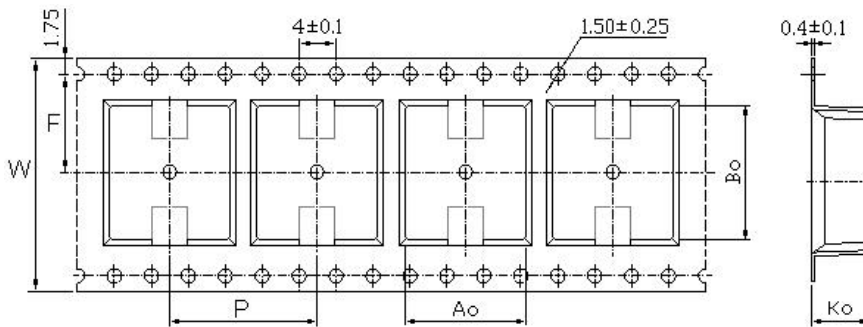
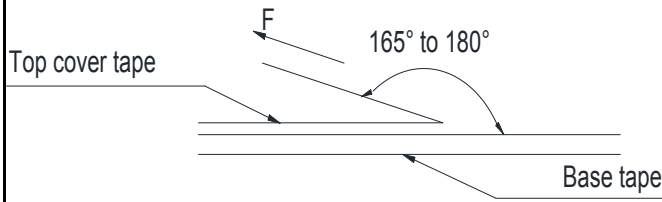


图2

P/N	W(mm)	P(mm)	A0(mm)	B0(mm)	K0(mm)					
MCPG2630	16.0	12.0	7.2	7.8	3.5	图1				
MCPG2640	16.0	12.0	7.2	7.8	4.2					
MCPG2650	16.0	12.0	7.2	7.8	5.2					
MCPG0430	24.0	16.0	10.8	11.3	3.5					
MCPG0440	24.0	16.0	10.8	11.3	4.2					
MCPG0450	24.0	16.0	10.8	11.3	5.2					
MCPG0513	24.0	20.0	13.5	13.9	13.0					
MCPG0535	24.0	16.0	13.5	14.0	3.7					
MCPG0550	24.0	16.0	13.5	14.0	5.2					
MCPG0565	24.0	16.0	13.5	14.0	6.7					
MCPG0575(5R6)	24.0	20.0	13.5	13.9	7.8					
MCPG0575(220, 330)	24.0	16.0	13.6	13.7	7.8					
MCPG0790	32.0	24.0	18.8	19.4	9.5	图2				
MCPG0912	44.0	32.0	23.1	23.65	12.8					

## 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:  
-55°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

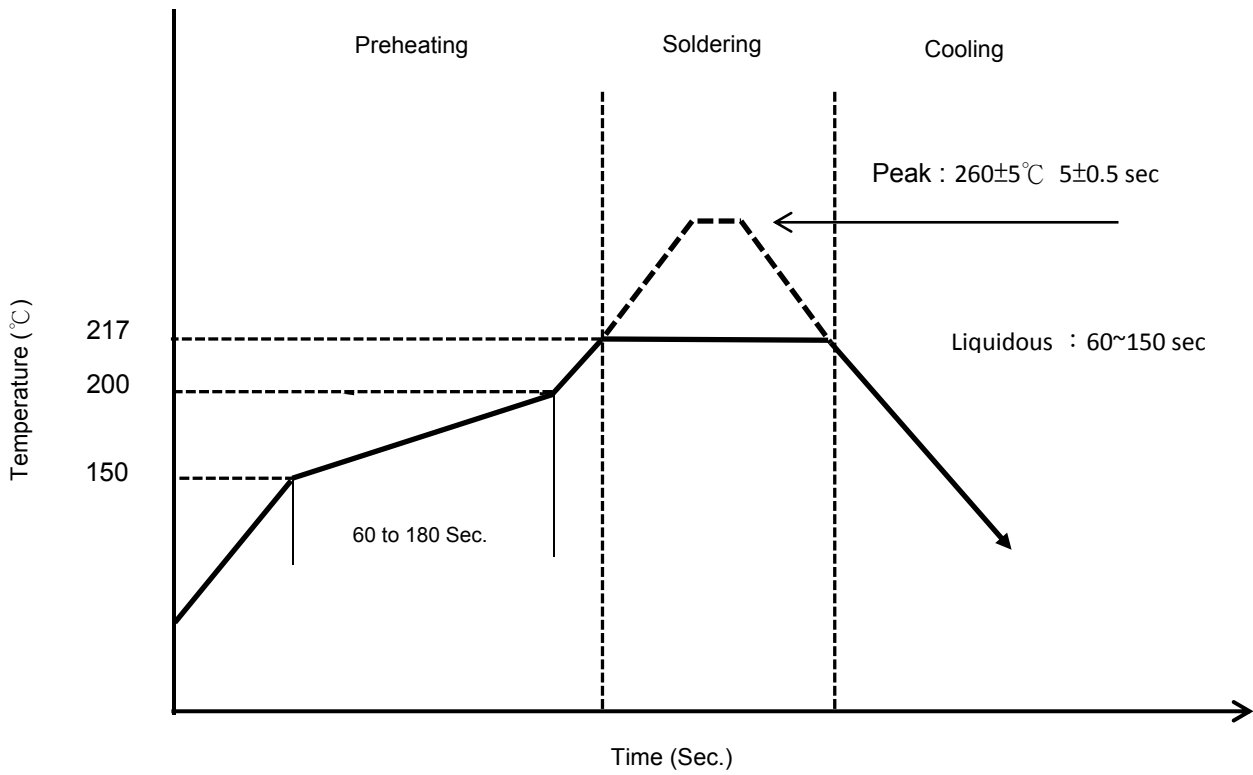
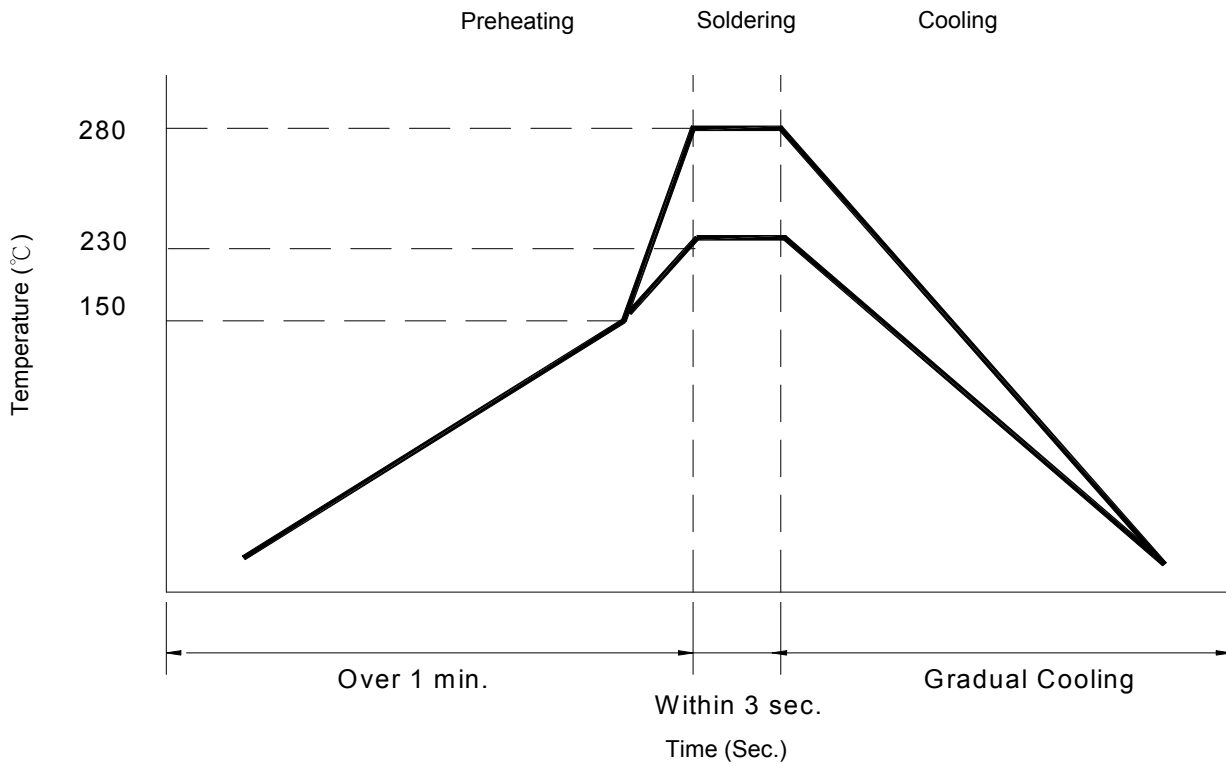
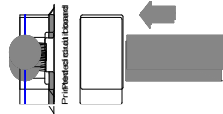


Figure 2. Hand Soldering



Reliability and Testing Conditions																	
Item	Specification	Conditions															
Operating temperature range	-55°C ~ +125°C ( Including self-temperature rise)																
Storage temperature and humidity range	-55°C ~ +85°C , 70% RH Max																
Solderability	More than 90% of the terminal electrode should be covered with solder.	<ul style="list-style-type: none"> <li>- Preheat: 150 °C , 60 sec</li> <li>- Solder: Sn96.5%-Ag3%-Cu0.5%</li> <li>- Temperature: 245±5°C</li> <li>- Flux for lead free: Rosin 9.5%</li> <li>- Dip time: 4±1 sec</li> <li>- Depth: completely cover the termination</li> </ul>															
Resistance to Soldering Heat	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	<ul style="list-style-type: none"> <li>- Solder technique simulation: SMD</li> <li>- Temperature (°C): 260 ± 5 (solder temp)</li> <li>- Time (s): 10 ± 1</li> <li>- Temperature ramp / immersion and emersion rate: 25 mm/s ± 6 mm/s</li> <li>- Number of heat cycles: 1</li> </ul>															
Resistance to High Temperature	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	500 hrs. at 125°C±3°C Unpowered. Measurement at 24±4 hours after test conclusion.															
Resistance to Low Temperature	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	500 hrs. at -40°C±2°C. Unpowered. Measurement at 24±4 hours after test conclusion.															
Resistance to Humidity	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in 40±2°C and 90 to 95% humidity , and 2 hour drying under normal condition.															
Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	<p>After 100 cycles of following condition.</p> <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Times (min.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-55±2°C</td> <td>30</td> </tr> <tr> <td>2</td> <td>Room Temperature</td> <td>Within 3</td> </tr> <tr> <td>3</td> <td>125±3°C</td> <td>30</td> </tr> <tr> <td>4</td> <td>Room Temperature</td> <td>Within 3</td> </tr> </tbody> </table>	Step	Temperature (°C)	Times (min.)	1	-55±2°C	30	2	Room Temperature	Within 3	3	125±3°C	30	4	Room Temperature	Within 3
Step	Temperature (°C)	Times (min.)															
1	-55±2°C	30															
2	Room Temperature	Within 3															
3	125±3°C	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 the ferrite must not be damaged	<p>Solder a chip to test substrate, and then laterally apply a load 10N in the arrow direction, Duration :5s</p> 															
Drop Test	Inductance within ±20% of initial value. The appearance shall not break.	Drop 3 times on a concrete floor from a height of 75cm by inimum packing															