



ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

RoHS & Halogen Free & REACH Compliance.

### SPECIFICATION FOR APPROVAL

Customer : 超利維

Customer P/N:

Drawing No : IE1-8B0365

Quantity : X Pcs. DATE : 2018/11/23

Chilisin P/N : MHCB10040-2R2M-C1

SPECIFICATION ACCEPTED BY:	
COMPONENT ENGINEER	
ELECTRICAL ENGINEER	
MECHANICAL ENGINEER	
APPROVED	
REJECTED	

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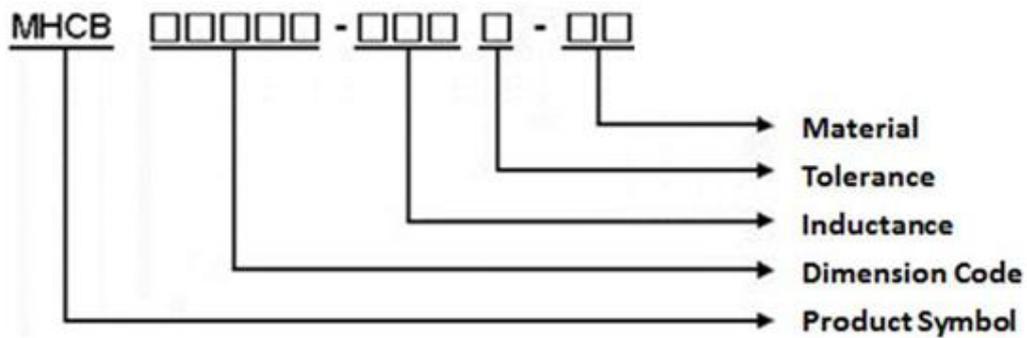
  

Drawn by 吳韋邑 <b>Wayne.Wu</b>	Checked by 吳韋邑 <b>Wayne.Wu</b>	Approved by 劉建志 <b>Richard.Liu</b>
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## MHCB10040 Series Specification

**1 Scope:** This specification applies to large current and low loss SMD shielding power inductor.

**2 Part Numbering:**

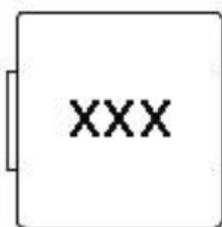


**3 Rating:**

Operating Temperature:  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)

Storage Temperature: (on tape & reel):  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ ; 75% RH max.

**4 Marking:**



**Ex : MHCB10040-2R2M-C1**

**Marking : 2R2**

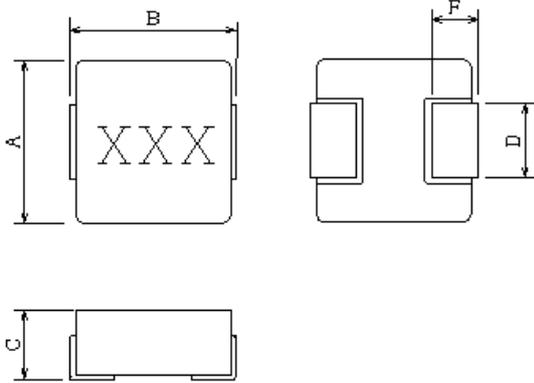
**Marking color : Black**

**5 Standard Testing Condition**

	Unless otherwise specified	In case of doubt
Temperature	Ordinary Temperature(15 to 35°C)	20 to 30°C
Humidity	Ordinary Humidity(25 to 85% RH)	50 to 80 %RH

# MHCB10040 Series Specification

## 6 Configuration and Dimensions:



Dimensions in mm

TYPE	MHCB10040
A	10.2±0.3
B	11.6 Max.
C	4.0Max.
D	3.0±0.5
F	2.5±0.5

## 7 Electrical Characteristics:

Part No.	Inductance (uH)	Tolerance (±%)	Test Freq.	I <sub>rms</sub> (A) Typ	I <sub>sat</sub> (A) Typ	RDC(mΩ) Max(Typ)	Marking
MHCB10040-2R2M-C1	2.2	20	100KHz,0.5V	12	27	7.0(6.7)	2R2

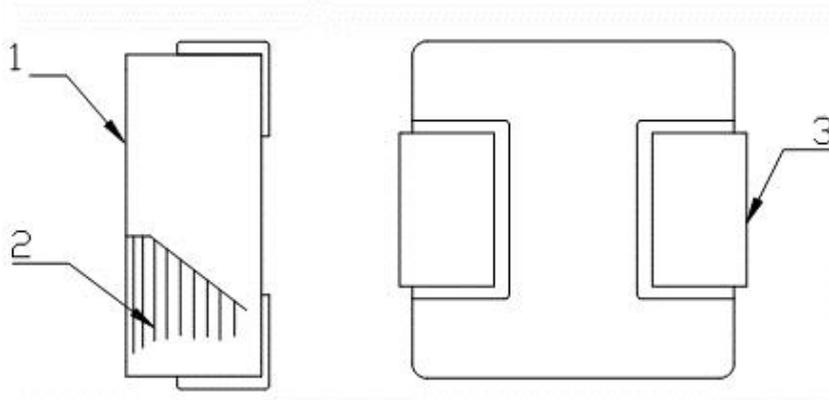
### Note:

1. Operating temperature range -55°C ~ 125°C (Including self - temperature rise)
2. I<sub>sat</sub> for Inductance drop 20% from its value without current.
3. I<sub>rms</sub> for a 40°C temperature rise from 25°C ambient.
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.  
Circuit design 125°C under worst case operating conditions. Component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Absolute maximum voltage 30VDC

## MHCB10040 Series Specification

### 8 MHCB10040 Series

#### 8.1 Construction:



#### 8.2 Material List:

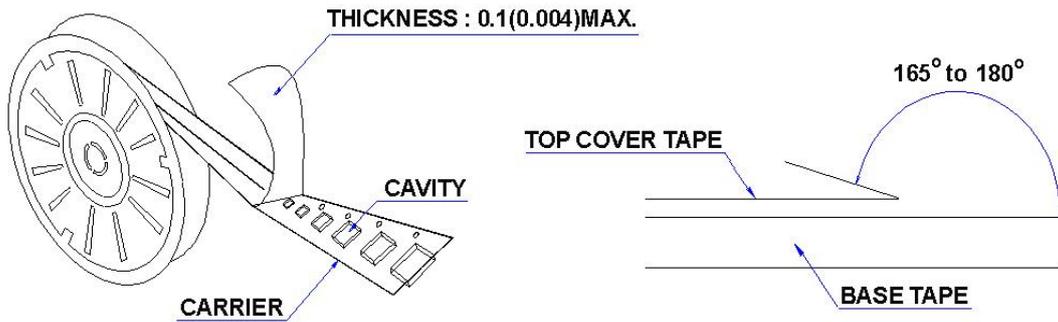
No	Part	Material
1	COATING+ CORE	CARBONYL IRON POWDERS
2	WMRE	COPPER WMRE
3	TERMINAL	TERMINAL COPPER

# MHCB10040 Series Specification

## 9 Packaging:

### 9.1 Packaging -Cover Tape

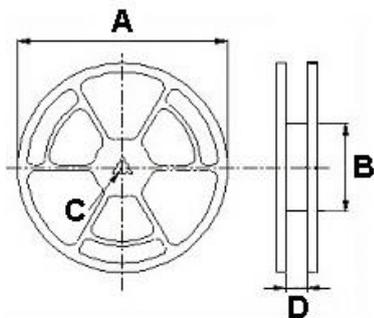
The force for tearing off cover tape is 10 to 130 grams in the arrow direction.



### 9.2 Packaging Quantity

TYPE	PCS/REEL
MHCB10040	500

### 9.3 Reel Dimensions



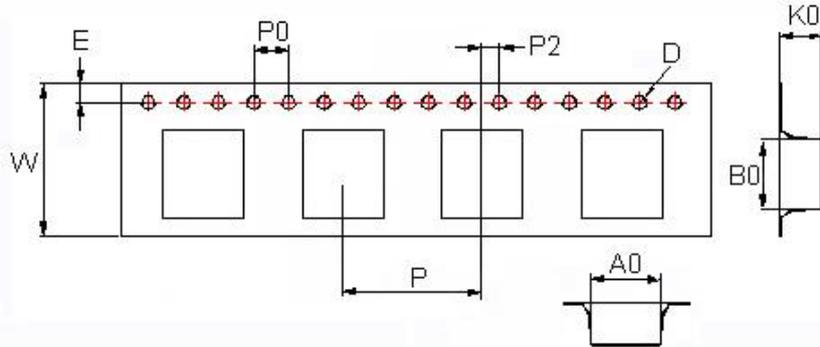
Dimensions in mm

TYPE	A	B	C	D
MHCB10040	330	100	13	24.4

## MHCB10040 Series Specification

### 9 Packaging:

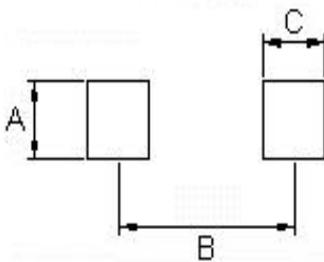
#### 9.4 Tape Dimensions in mm



TYPE	A0	B0	K0	D	E	W	P	P0	P2
MHCB10040	10.6	11.7	4.25	1.55	1.75	24	16	4	2

### 10 Recommended Land Pattern:

#### PAD LAYOUT



#### Dimensions in mm

TYPE	A(mm)	B(mm)	C(mm)
MHCB10040	4.0	9.5	3.5

### 11 Note:

1. Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Do not knock nor drop.
3. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.
4. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)
5. The moisture sensitivity level (MSL) of products is classified as level 1.

# MHCB10040 Series Specification

12 Graph:

