



Form No.: QF-1274  
Edition: 2

ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

RoHS & Halogen Free & REACH Compliance.

## SPECIFICATION FOR APPROVAL

Customer : \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Drawing No : \_\_\_\_\_

Quantity : 0 Pcs. Date : 2020/03/24

Chilisin P/N : BMQADY1010404R7MA1

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

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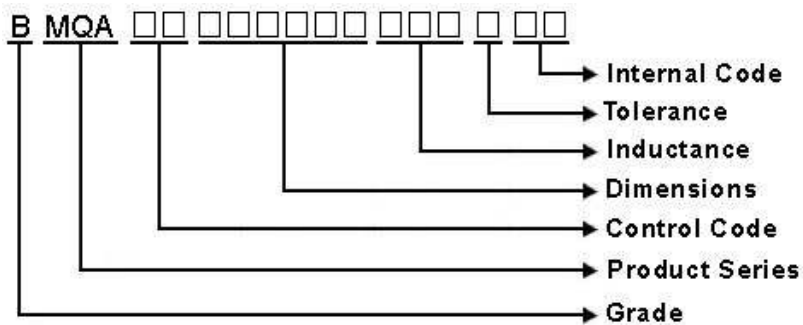
Checked by  
吳韋邑 wayne.wu

Approved by  
葉信賢 Ben.Yeh

## BMQADY101040 Series Specification

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

**2 Part Numbering:**

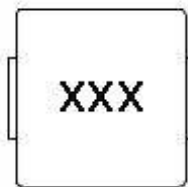


**3 Rating:**

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:**



**Marking : XXX**

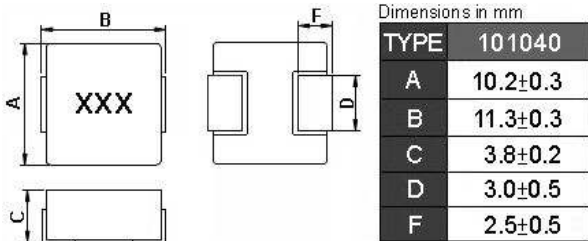
**Marking color : Black**

**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

# BMQADY101040 Series Specification

## 6 Configuration and Dimensions:



## 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
BMQADY101040R22MD1	0.22	20	100kHz,0.5	40(42)	55(60)	0.54(0.45)	R22
BMQADY101040R33MD1	0.33	20	100kHz,0.5	32(35)	45(50)	0.68(0.62)	R33
BMQADY1010401R0MD1	1	20	100kHz,0.5V	23(25)	26(30)	2.4(2.2)	1R0
BMQADY1010402R2MD1	2.2	20	100kHz,0.5V	15(15.6)	17(20)	4.7(4.3)	2R2
BMQADY1010404R7MA1	4.7	20	100kHz,0.5V	10.5(11)	13(14)	10.5(9.5)	4R7

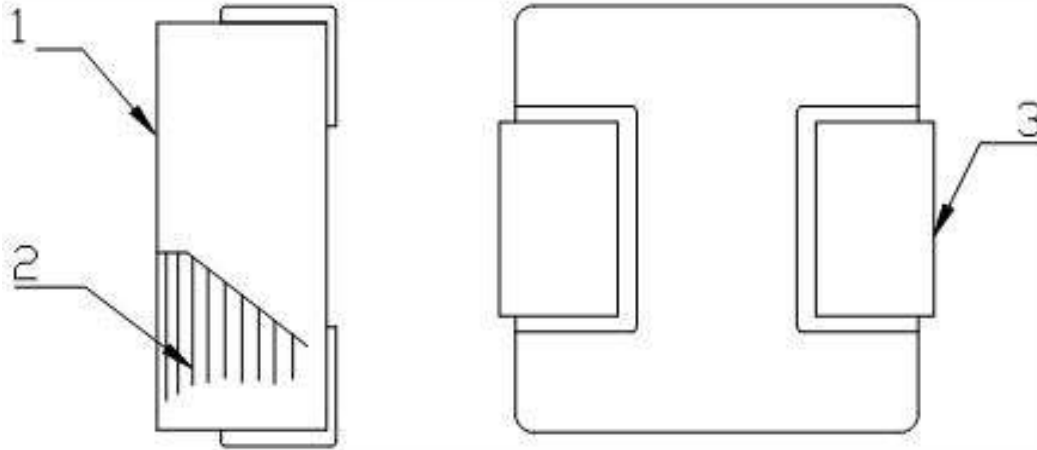
**Note:**

1. Operating temperature range -55°C~125°C (Including self - temperature rise)
2. I<sub>sat</sub> for Inductance drop 30% 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

## BMQADY101040 Series Specification

### 8 BMQADY101040 Series

#### 8.1 Construction:



#### 8.2 Material List:

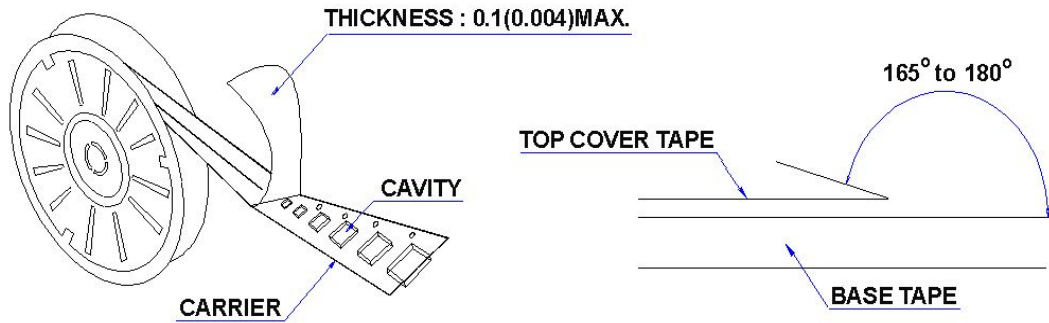
No	Part	Material
1	Core	Magnetic Metal Powder
2	Wire	Copper Wire
3	Terminal	Terminal Copper

# BMQADY101040 Series Specification

## 9 Packaging:

### 9.1 Packaging -Cover Tape

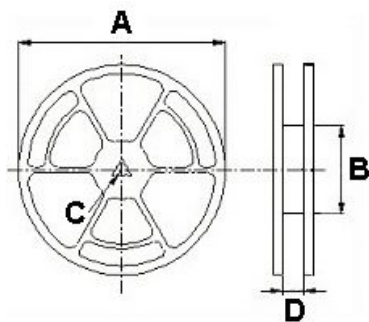
The force for tearing off cover tape is 10 to 130 grams in the arrow direction.



### 9.2 Packaging Quantity

TYPE	PCS/REEL
101040	500

### 9.3 Reel Dimensions



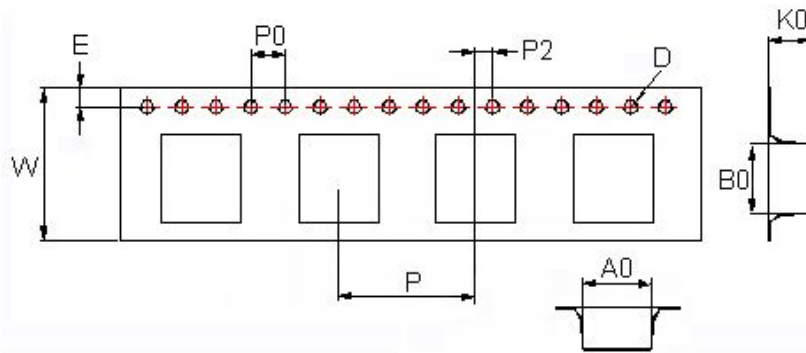
Dimensions in mm

TYPE	A	B	C	D
101040	330	100	13	24.4

## BMQADY101040 Series Specification

### 9 Packaging:

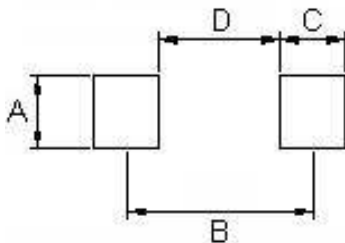
#### 9.4 Tape Dimensions in mm



TYPE	A0	B0	K0	D	E	W	P	P0	P2
101040	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(in/mm)	B(in/mm)	C(in/mm)	D(in/mm)
101040	0.157/4.0	0.374/9.5	0.138/3.5	0.236/6.0

### 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.

## BMQADY101040 Series Specification

12 Graph: BMQADY1010404R7MA1

