



SPECIFICATION FOR APPROVAL

Customer : 超利維
Customer P/N:
Drawing No : TE1-830293
Quantity : X Pcs. Date : 2018/03/15
Chilisin P/N : MHCB10040-100M-AU

Automotive Grade Inductor

Halogen Free
RoHS Compliant
REACH Compliant
Lead Free Solders
AEC-Q200

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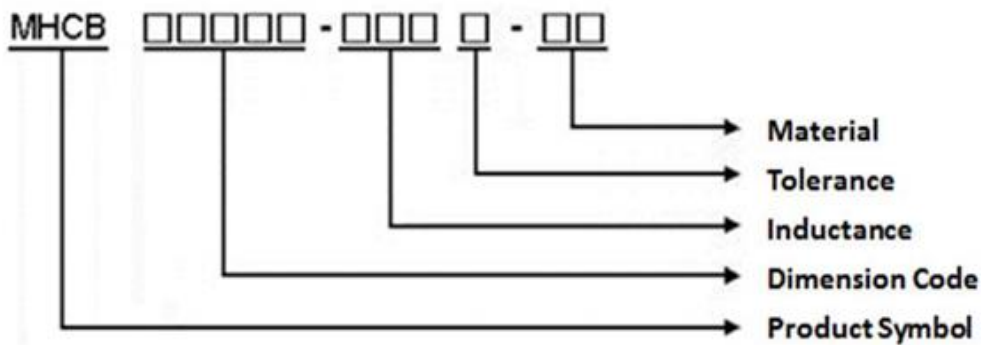
Approved by
鍾瑞民 jacky.chung

MHCB10040 Series Specification

AEC-Q200

1 Scope: This specification applies to Large current and Low Loss SMD Power INDUCTOR

2 Part Numbering:

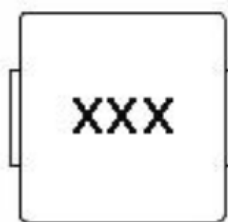


3 Rating:

Operating Temperature: - 40°C ~ 125°C

Storage Temperature: (on tape & reel): -20°C to +40°C; 75% RH max.

4 Marking:



Ex : MHCB10040-100M-AU

Marking : 100

Marking color : Black

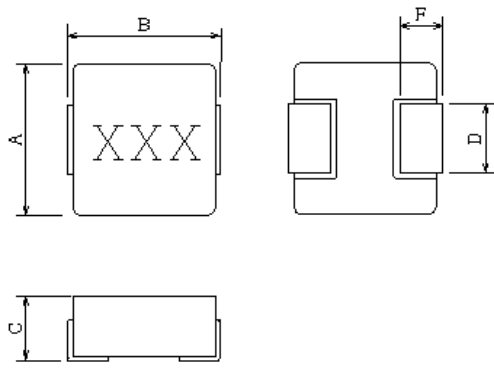
5 Standard Testing Condition

	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

AEC-Q200

6 Configuration and Dimensions:



Dimensions in mm

TYPE	MHCB10040
A	10.1±0.3
B	11.6 Max
C	3.8±0.2
D	3.0±0.5
F	2.5±0.5

7 Electrical Characteristics:

Part No.	Inductance (uH)	Tolerance (±%)	Test Freq.	I _{rms} (A) Typ	I _{sat} (A) Typ	RDC(mΩ) Max(Typ)	Marking
MHCB10040-100M-AU	10	20	100kHz,0.5V	7	10	30(27)	100

Note:

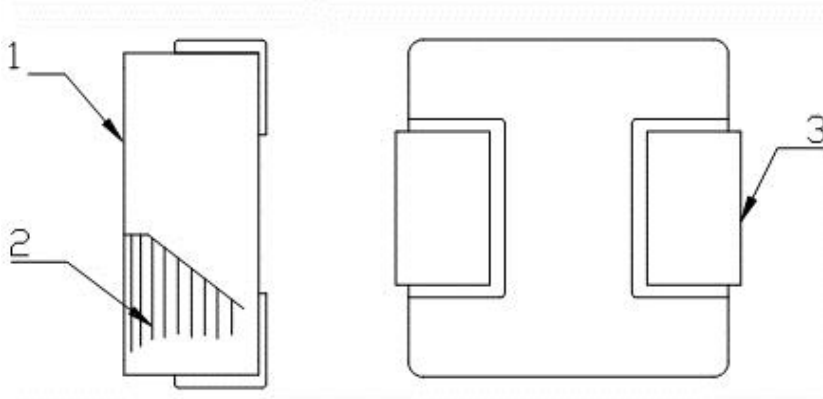
1. Operating temperature range -40°C ~125°C
2. I_{sat} for Inductance drop 30% from its value without current.
3. I_{rms} for a 40°C temperature rise from 25°C ambient.
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design 125°C under 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

AEC-Q200

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

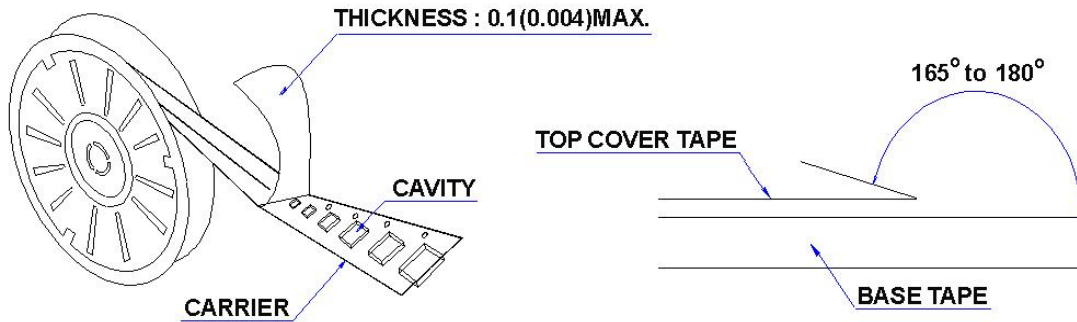
MHCB10040 Series Specification

AEC-Q200

9 PACKAGING

9.1 Packaging -Cover tape

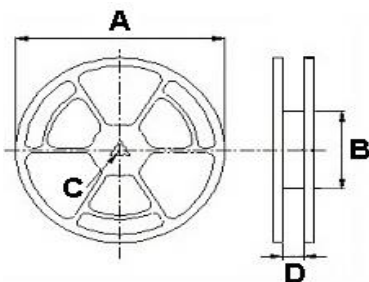
The force for tearing off cover tape is 10 to 130 grams in the arrow direction.



9.2 Packaging Quantity

TYPE	PCS/REEL
MHCB10040	500

9.3 Reel Dimensions



Dimensions in mm

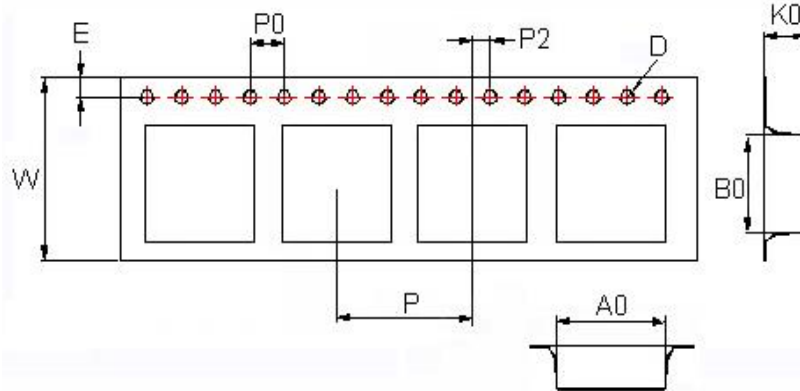
TYPE	A	B	C	D
MHCB10040	330	100	13	24.4

MHCB10040 Series Specification

AEC-Q200

9 PACKAGING

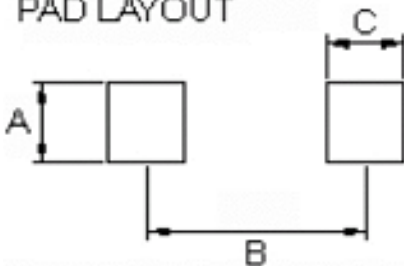
9.4 Tape Dimensions in mm



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 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

AEC-Q200

12 Graph:

