Specification Sheet for Approved

Customer Name:	
Customer Part No.:	
Ceaiya Part No:	CCM5025 Series
Spec No:	L143

【For Customer Approval Only】

If you Approval, Please Stamp

【RoHS Compliant Parts】

Approved By	Checked By	Prepared By
李庆辉	苏高峰	劳水花

深圳市柯爱亚电子有限公司

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【Version of Changed Record】

Rev.	Effective Date	Changed Contents	Change Reasons	Approved By
A0	2024-06-11	New release	/	Li qing hui

1. Scope

This specification applies to the CCM5025 Series of wire wound SMD Common Mode Filter.

2. Product Description and Identification (Part Number)

1) Description:

CCM5025 series of of wire wound SMD Common Mode Filter.

2) Product Identification (Part Number)

CCM	5025	-	101	T
(1)	(2)		(3)	(4)

(1) Chip Common Mode Choke Coil
(2) Dimension(L×W)
(3) Impedance (Typ. at 100MHz)
(4) Packaging Code K: Taping (Φ330mm/reel)

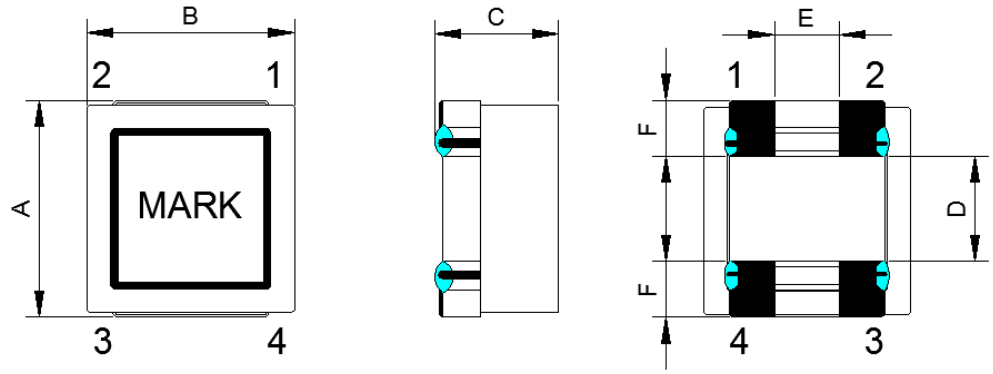
3. Electrical Characteristics

Please refer to Item 5.

1）Operating temperature range (individual chip without packing): -40℃ ~ +125℃ （Including Self-heating）.

2）Storage temperature range (packaging conditions): -10℃ ~ +40℃ and RH 70% (Max.).

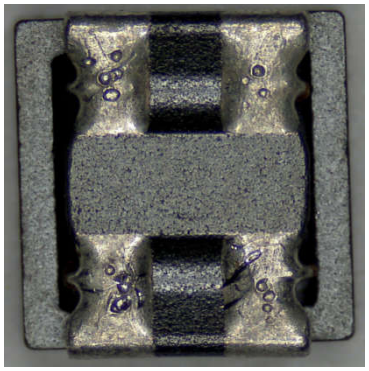
4. Shape and Dimensions (Unit:mm)



产品需喷码印字白色，“MARK”表示阻抗。

A	B	C	D	E	F
5.0±0.3	5.0±0.3	2.5±0.2	2.0Typ.	1.2 Typ.	1.5 Typ.

实物照片：



3. Electrical Characteristics

Part No.	Impedance (Ω) @100 MHz		RDC(mΩ) Max[1 line]	Rated Current (A) Max	IR(MΩ) Min	Rated Voltage (V) Max	Marking
	Min.	Typ.					
CCM5025-101T	60	100	13	6.0	10	100	101
CCM5025-251T	180	250	20	5.0	10	50	251
CCM5025-501T	300	500	27	4.0	10	50	501
CCM5025-102T	600	1000	34	2.0	10	50	102
CCM5025-142T	840	1400	56	1.5	10	50	142
CCM5025-152T	840	1400	56	1.5	10	50	152

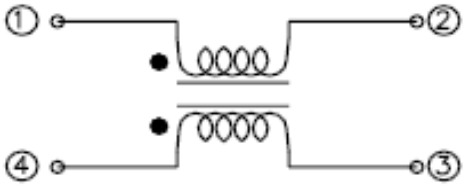
※ **Measurement Equipment:**

Common mode impedance z(Ω) : 4991A

DC resistance : HIOKI3540

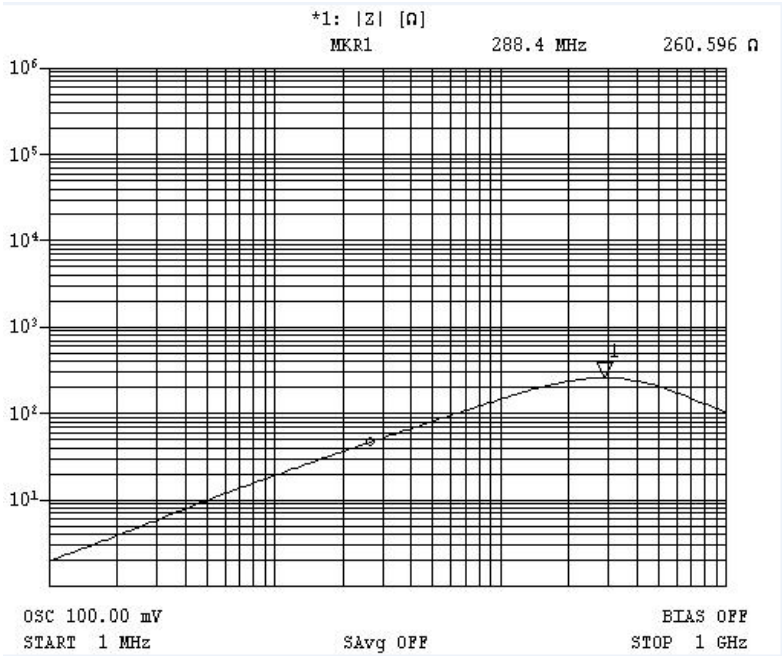
Insulation resistance: Chroma 19053

6. Schematic Diagram



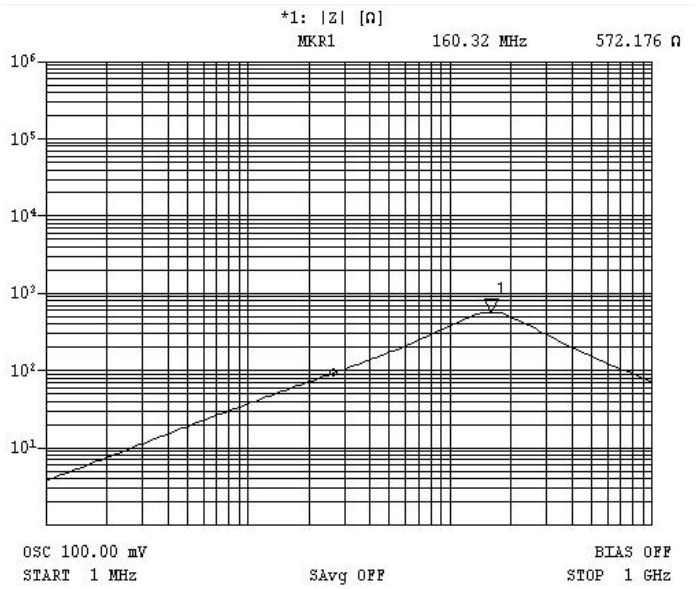
7. TYPICAL ELECTRICAL CHARACTERISTICS

CCM5025-101T

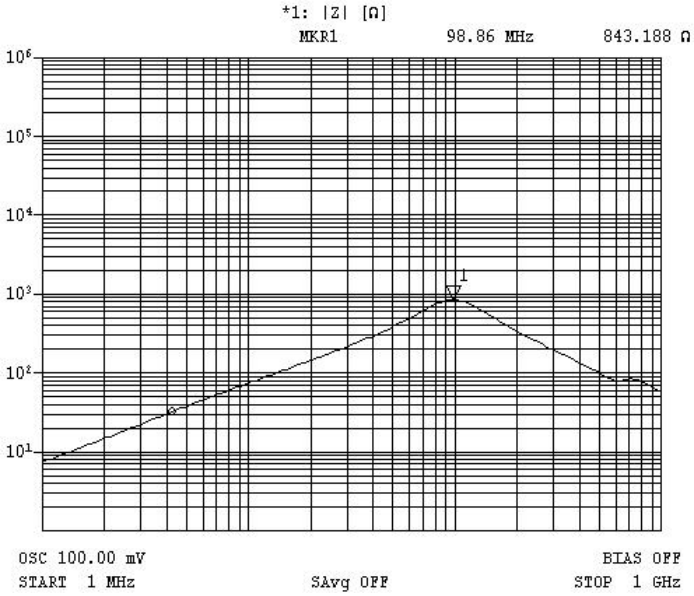


7. TYPICAL ELECTRICAL CHARACTERISTICS

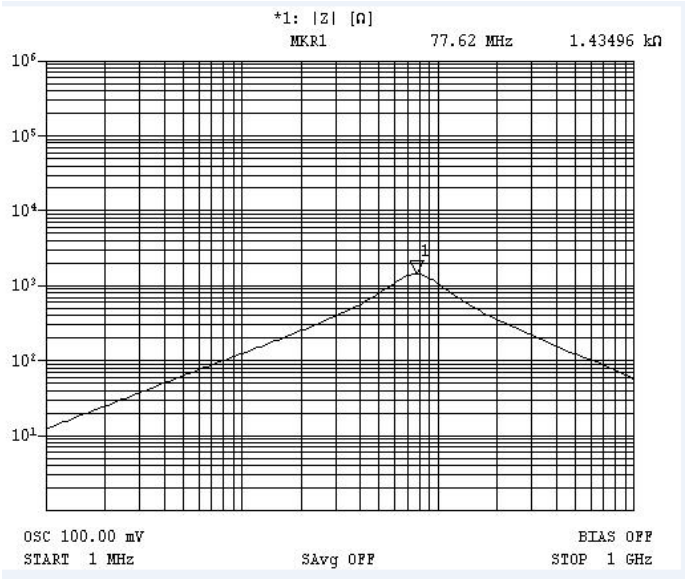
CCM5025-251T



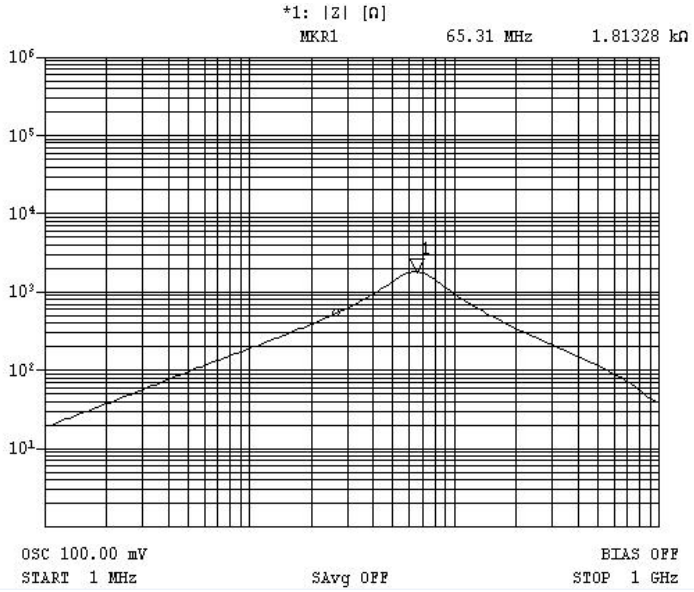
CCM5025-501T



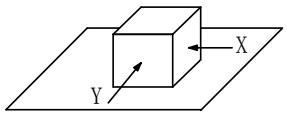
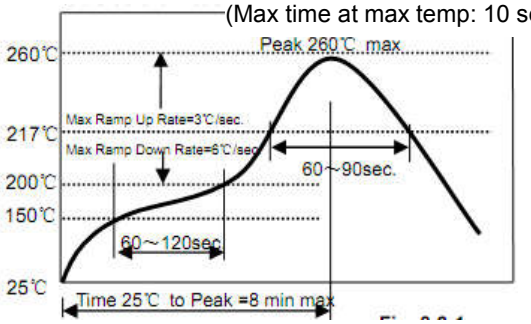
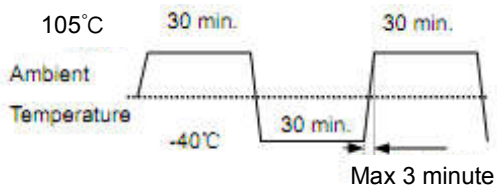
CCM5025-102T



CCM5025-142T&152T

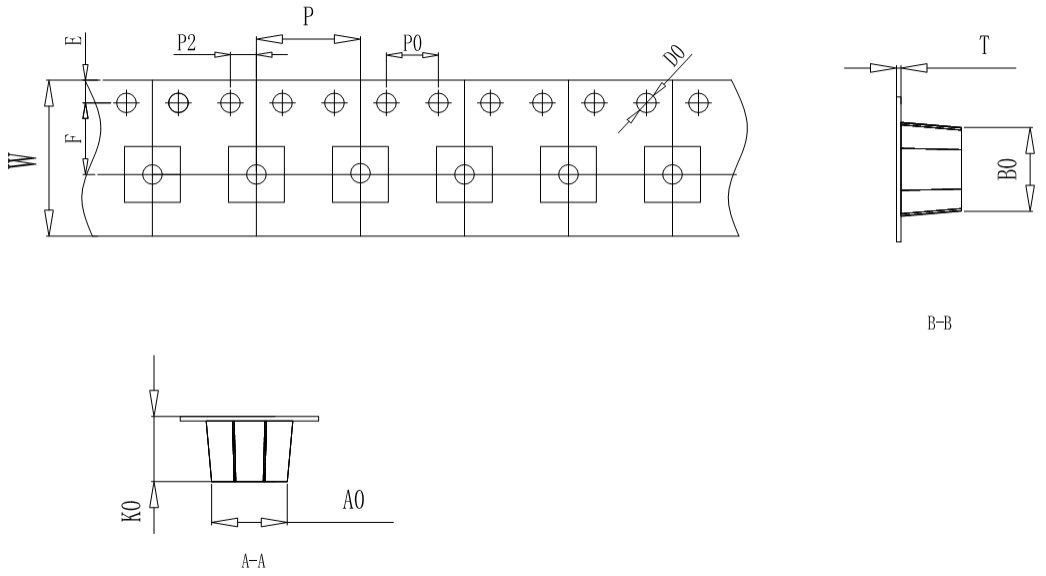


8.Reliability Test

Items	Requirements	Test Methods and Remarks
8.1 Terminal Strength	No removal or split of the termination or other defects shall occur.  Fig.8.1-1	1) Solder the inductor to the testing jig (glass epoxy board shown in Fing.8.1-1) using eutectic solder. Then apply a force in the direction of the arrow. 2) 10N force. 3) Keep time: 5±2s
8.2 High Temperature	1. No visible mechanical damage. 2. Inductance change: Within ±10%	1) Storage Temperature :125±5℃ 2) Duration : 96 ±4 Hours 3) Recovery : then measured at room ambient temperature after placing 24 hours.
8.3 Low Temperature	1. No visible mechanical damage 2. Inductance change: Within ±10%	1) Temperature and time: -40±5℃ 2) Duration: 96±4 hours 3) Recovery : then measured at room ambient temperature after placing 24 hours.
8.4 Vibration test	1. No visible mechanical damage. 2. Inductance change: Within ±10%	1) Frequency range:10Hz~55Hz~10Hz 2) Amplitude:1.5mm p-p 3) Direction:X,Y,Z 4) Time:1 minute/cycle,2hours per axis
8.5 High Temperature Storage Tested	1. No visible mechanical damage. 2. Inductance change: Within ±10%	1)Storage Temperature :60±2℃ 2) Relative Humidity :90-95% RH 3) Duration : 96 ±4 Hours 4)Recovery : then measured at room ambient temperature after placing 24 hours.
8.6 Resistance to Soldering Heat	1. No visible mechanical damage. 2. Inductance change: Within ±10%  Fig.8.6-1	1) Re-flowing Profile: Please refer to Fig.8.6-1 2) Test board thickness: 1.0mm 3) Test board material: glass epoxy resin 4) The chip shall be stabilized at normal condition for 1~2 hours before measuring
8.7 Thermal Shock	1. No visible mechanical damage. 2. Inductance change: Within ±10%  Fig.8.7-1	1) Temperature and time: -40±3℃ for 30±3 min→105℃ for 30±3min, please refer to Fig.8.7-1. 2) Transforming interval: Max,3 minute 3) Tested cycle: 100 cycles 4) The chip shall be stabilized at normal condition for 1~2 hours before measuring

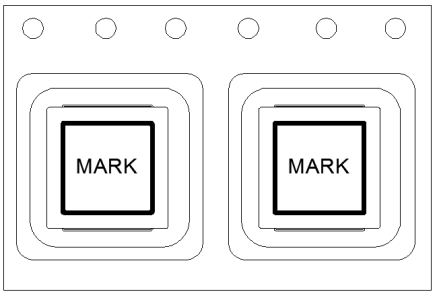
9.Packaging and Marking:

9.1 Appearance and Dimensions

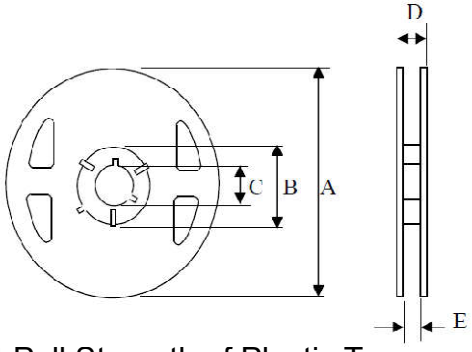


ITEM	W	A0	B1	K0	P	F	E	D0	P0	P2	T
DIM	12.00	5.35	5.35	2.8	8.00	5.50	1.75	1.50	4.00	2.00	0.35
TOLE	±0.3	±0.1	±0.1	±0.1	±0.1	±0.15	±0.1	+0.1	±0.1	±0.1	±0.05

9.2 .Taping Dimensions:

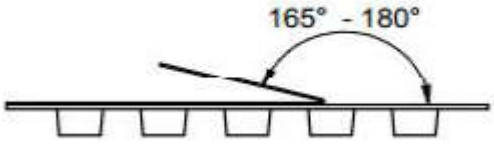


9.3 Reel Dimensions:



Type	12mm
A	330
B	60±0.8
C	13±0.4
D	16
E	12.5

9.4 Pull Strength of Plastic Tape



Tape width	Distance	Pull-of force
12 mm	8 mm	10~120g

9.5 Packaging Quantity:

2.5KPCS/ Reel (13 寸盘)