

PRODUCT SPECIFICATION

SPEC. NO: C-2601-05

DATE: Jan.7,2026

CUSTOMER'S PRODUCT NAME:

EMTEK PRODUCT NAME:

BCMC121166-SERIES

THIS SPECIFICATION IS:

- ☐ FULLY ACCEPTED
- ☐ DENIED
- ☐ ACCEPTED UNDER THE FOLLOWING CONDITIONS



SIGNATURE: DATE:

NAME(PRINT):

TITLE:

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EMTEK CO., LTD.

FACTORY:

39,Chingao Rd.,(305)Hsinpu,
Hsinchu Hsien,Taiwan,R.O.C

TEL: 03-5894-433

FAX: 03-5894-523

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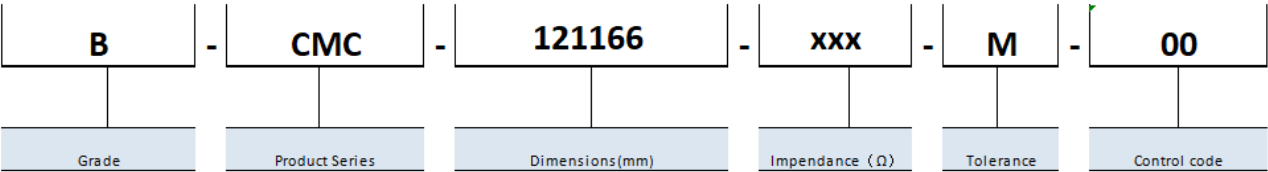
1. Features

- Electromagnetic Interference (EMI) Suppression: Provides stable impedance characteristics at the test frequency of 100MHz, effectively attenuating common-mode and differential-mode interference signals to meet electromagnetic compatibility requirements.
- High-Frequency Noise Filtering: Targeting high-frequency circuit environments, blocks unwanted high-frequency clutter through high-impedance characteristics to ensure the purity of signal transmission.
- Circuit Operation Stabilization: Low DC Resistance (DCR) design reduces power loss, and combined with rated current and voltage parameters, ensures stable circuit operation within the wide temperature range of -40°C~+125°C.
- Polarization-Free Mounting Compatibility: Non-polar design simplifies circuit assembly processes, adapts to automated surface mounting technology, and improves production efficiency.

2. Application

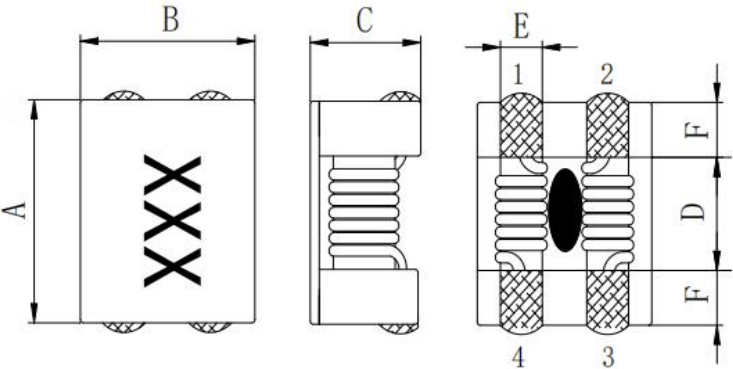
- Suitable for power management modules of consumer electronic devices such as smartphones and tablet computers.
- Compatible with smart home products including smart speakers and smart sockets.
- Used in circuit systems of industrial control equipment like PLCs and frequency converters.
- Applied to security monitoring equipment such as cameras and digital video recorders.

3. Part numbering



4. Appearance and Dimensions

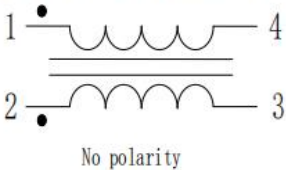
EXTERNAL DIMENSIONS UNIT: mm



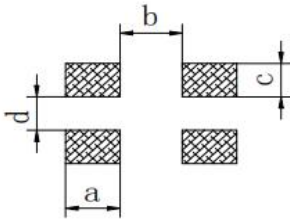
Marking: 白色 "XXX".

A	B	C	D	E	F
12.0±0.5	10.8±0.5	6.60Max	7.00Ref	2.70Ref	2.50Ref

ELECTRICAL SCHEMATIC



PAD LAYOUT UNIT: mm



a	b	c	d
3.25	2.0	3.0	6.5

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5. Rating

NOTE:

- Operating temperature: -40℃~+125℃

ELECTRICAL CHARACTERISTICS(@ 25℃)

Part No.	Impedance (Ω)	Test Freq	DCR (mΩ)	Rated Current (A)	Rated Voltage (V)Dc	Insulation Resistance (MΩ)	MARKING
BCMC121166800M00	80 Min(140Typ)	100MHz	2 Max	10.0	125	10.0 Min	800
BCMC121166701M00	500 Min(700Typ)	100MHz	6 Max	8.00	125	10.0 Min	701
BCMC121166801M00	600 Min(800Typ)	100MHz	8 Max	8.00	125	10.0 Min	801
BCMC121166102M00	750 Min(1000Typ)	100MHz	14 Max	6.00	125	10.0 Min	102
BCMC121166132M00	910 Min(1300Typ)	100MHz	23 Max	4.50	125	10.0 Min	132
BCMC121166222M00	2200 Min(2500Typ)	100MHz	35 Max	1.80	125	10.0 Min	222
BCMC121166272M00	2300 Min(2700Typ)	100MHz	50 Max	1.50	125	10.0 Min	272

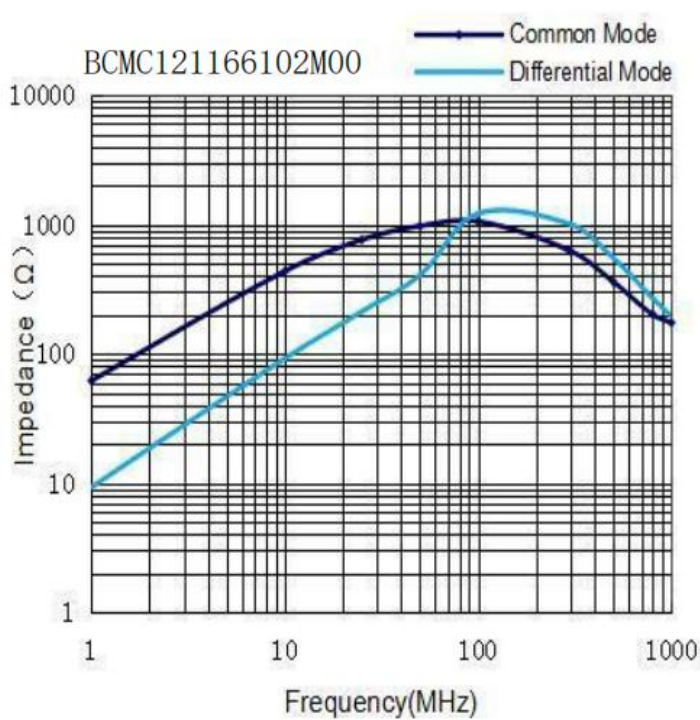
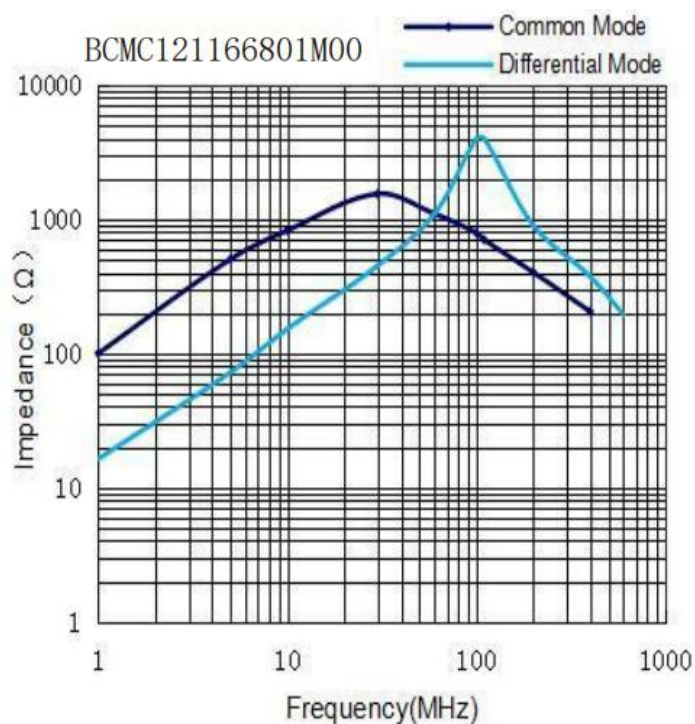
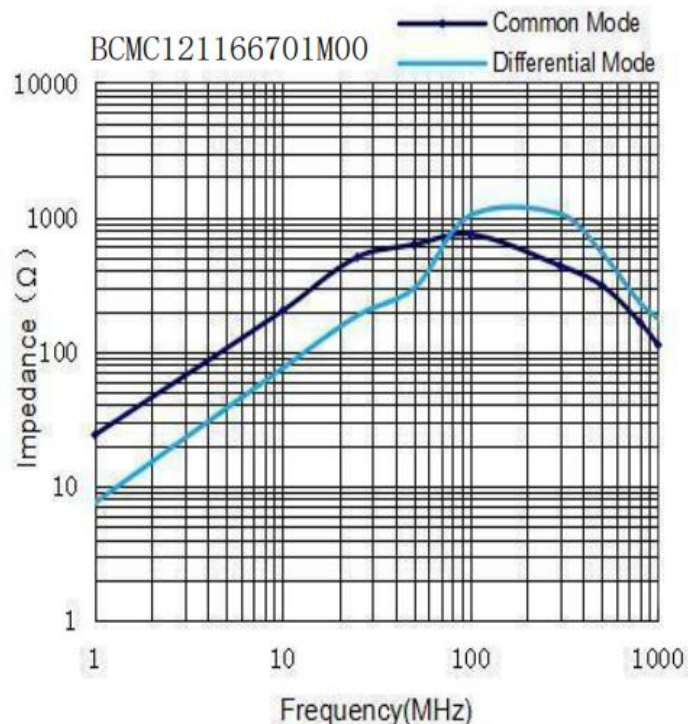
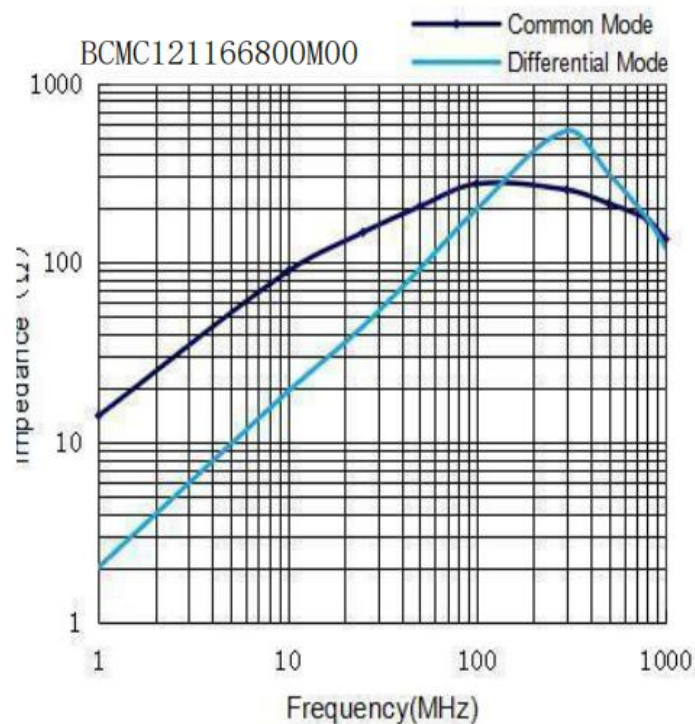
Rated Current: ΔT≦40℃ Typ

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Typical Electrical Characteristics

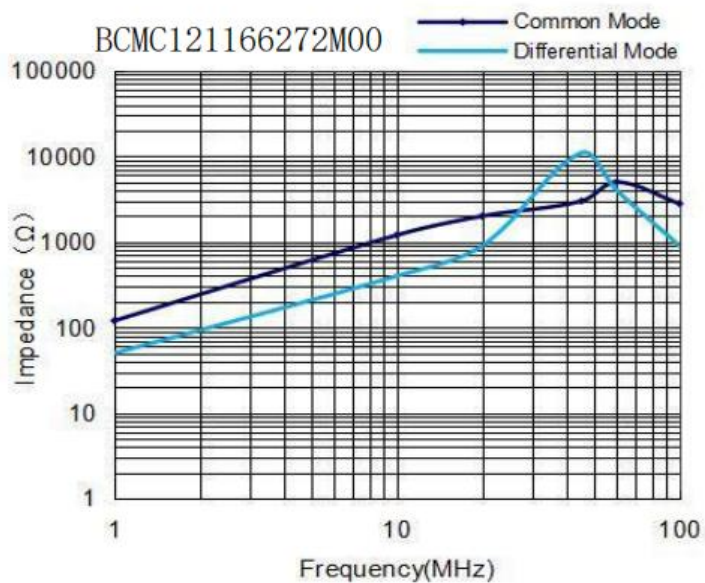
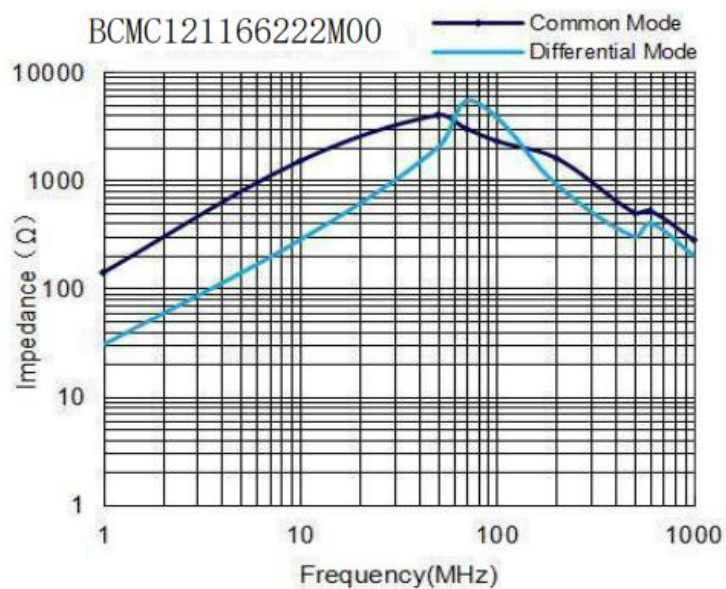
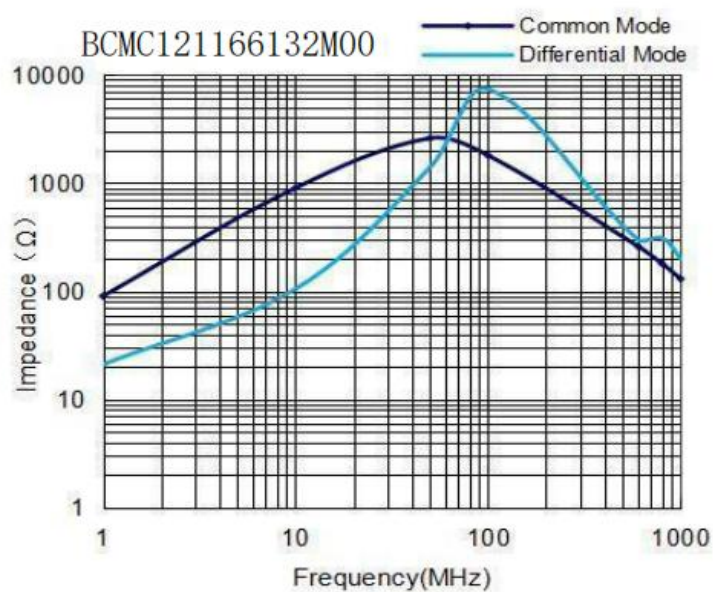


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6. Reliable Performance

TEST DATA FOR PREPRODUCTION SAMPLES (BCMC121166800M00)

MEAS. Item	Impedance (Ω)	DCR (mΩ)				A (mm)	B (mm)	C (mm)		
Spec	80 Min (140Typ)	2 Max				12.0±0.5	10.8±0.5	6.6Max		
Test Freq.	100MHz									
1	132	1.28				12.02	10.79	6.29		
2	134	1.13				12.06	10.74	6.21		
3	138	1.12				12.05	10.77	6.25		
4	144	1.17				12.08	10.76	6.29		
5	142	1.21				12.04	10.76	6.28		
6	146	1.22				12.06	10.75	6.25		
7	135	1.25				12.05	10.79	6.26		
8	134	1.18				12.04	10.82	6.27		
9	133	1.23				12.07	10.8	6.24		
10	132	1.25				12.00	10.84	6.30		
X	137	1.20				12.05	10.78	6.26		
R	14.0	0.16				0.08	0.10	0.09		

TEST INSTRUMENT:

Impedance 4287A

DCR GKT-502BC

PRODUCT SPECIFICATION

SPEC. NO.

C-2601-05

TEST DATA FOR PREPRODUCTION SAMPLES (BCMC121166701M00)

MEAS. Item	Impedance (Ω)	DCR (mΩ)				A (mm)	B (mm)	C (mm)		
Spec	500 Min (700Typ)	6 Max				12±0.5	10.8±0.5	6.6 Max		
Test Freq.	100MHz									
1	731	4.70				12.02	10.79	6.33		
2	792	4.80				12.05	10.76	6.31		
3	785	4.75				12.04	10.75	6.29		
4	754	4.83				12.03	10.78	6.28		
5	768	4.86				12.06	10.76	6.32		
6	772	4.74				12.08	10.75	6.34		
7	782	4.96				12.02	10.77	6.31		
8	747	4.74				12.01	10.76	6.30		
9	736	4.86				12.00	10.79	6.29		
10	762	4.79				12.05	10.82	6.28		
X	762	4.80				12.03	10.77	6.31		
R	61.0	0.26				0.06	0.07	0.06		

TEST INSTRUMENT:

Impedance 4287A

DCR GKT-502BC

PRODUCT SPECIFICATION

SPEC. NO.

C-2601-05

TEST DATA FOR PREPRODUCTION SAMPLES (BCMC121166801M00)

MEAS. Item	Impedance (Ω)	DCR (mΩ)				A (mm)	B (mm)	C (mm)		
Spec	600 Min(800Typ)	8 Max				12.0±0.5	10.8±0.5	6.6Max		
Test Freq.	100MHz									
1	854	5.92				12.07	10.77	6.25		
2	867	5.96				12.05	10.76	6.28		
3	898	5.90				12.04	10.79	6.30		
4	847	5.86				12.03	10.78	6.32		
5	858	5.84				12.07	10.81	6.31		
6	860	5.82				12.06	10.74	6.29		
7	892	5.97				12.05	10.76	6.30		
8	903	5.74				12.04	10.77	6.33		
9	884	5.85				12.03	10.79	6.32		
10	829	5.92				12.05	10.82	6.30		
X	867	5.88				12.05	10.78	6.30		
R	74.0	0.23				0.04	0.08	0.08		

TEST INSTRUMENT:

Impedance 4287A

DCR GKT-502BC

PRODUCT SPECIFICATION

SPEC. NO.

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TEST DATA FOR PREPRODUCTION SAMPLES (BCMC121166102M00)

MEAS. Item	Impedance (Ω)	DCR (mΩ)				A (mm)	B (mm)	C (mm)		
Spec	750 Min(1000Typ)	14 Max				12.0±0.5	10.8±0.5	6.6Max		
Test Freq.	100MHz									
1	985	8.85				12.08	10.77	6.28		
2	996	8.33				12.05	10.76	6.32		
3	947	8.71				12.06	10.79	6.31		
4	925	8.72				11.99	10.79	6.35		
5	898	8.58				12.05	10.74	6.32		
6	956	8.76				12.06	10.75	6.30		
7	987	8.69				12.09	10.78	6.32		
8	992	8.78				12.04	10.77	6.31		
9	964	8.54				12.05	10.83	6.32		
10	1012	8.91				12.02	10.75	6.33		
X	966	8.69				12.05	10.77	6.32		
R	114	0.58				0.10	0.09	0.07		

TEST INSTRUMENT:

Impedance 4287A

DCR GKT-502BC

PRODUCT SPECIFICATION

SPEC. NO.

C-2601-05

TEST DATA FOR PREPRODUCTION SAMPLES (BCMC121166222M00)

MEAS. Item	Impedance (Ω)	DCR (mΩ)				A (mm)	B (mm)	C (mm)		
Spec	2200 Min(2500Typ)	35 Max				12.0±0.5	10.8±0.5	6.6Max		
Test Freq.	10MHz									
1	2457	17.0				12.05	10.76	6.28		
2	2398	16.9				12.08	10.78	6.30		
3	2422	16.9				12.06	10.79	6.32		
4	2458	16.7				12.05	10.74	6.30		
5	2501	17.1				12.04	10.76	6.33		
6	2426	16.8				12.03	10.75	6.29		
7	2413	17.0				12.03	10.74	6.25		
8	2355	17.1				12.05	10.77	6.26		
9	2387	16.8				12.07	10.81	6.24		
10	2392	16.5				12.02	10.83	6.29		
X	2421	16.9				12.05	10.77	6.29		
R	146	0.60				0.06	0.09	0.09		

TEST INSTRUMENT:

Impedance 4287A

DCR GKT-502BC

PRODUCT SPECIFICATION

SPEC. NO.

C-2601-05

TEST DATA FOR PREPRODUCTION SAMPLES (BCMC121166272M00)

MEAS. Item	Impedance (Ω)	DCR (mΩ)				A (mm)	B (mm)	C (mm)		
Spec	2300 Min (2700Typ)	50 Max				12.0±0.5	10.8±0.5	6.6Max		
Test Freq.	100MHz									
1	2653	18.3				12.04	10.76	6.25		
2	2588	18.5				12.05	10.77	6.23		
3	2635	18.2				12.03	10.79	6.30		
4	2639	18.2				12.06	10.76	6.29		
5	2687	18.6				12.05	10.79	6.25		
6	2704	18.4				12.04	10.75	6.32		
7	2699	18.6				12.03	10.76	6.30		
8	2655	18.5				12.02	10.77	6.31		
9	2731	18.4				12.08	10.82	6.28		
10	2612	18.2				12.02	10.84	6.26		
X	2660	18.4				12.04	10.78	6.28		
R	143	0.40				0.06	0.09	0.09		

TEST INSTRUMENT:

Impedance 4287A

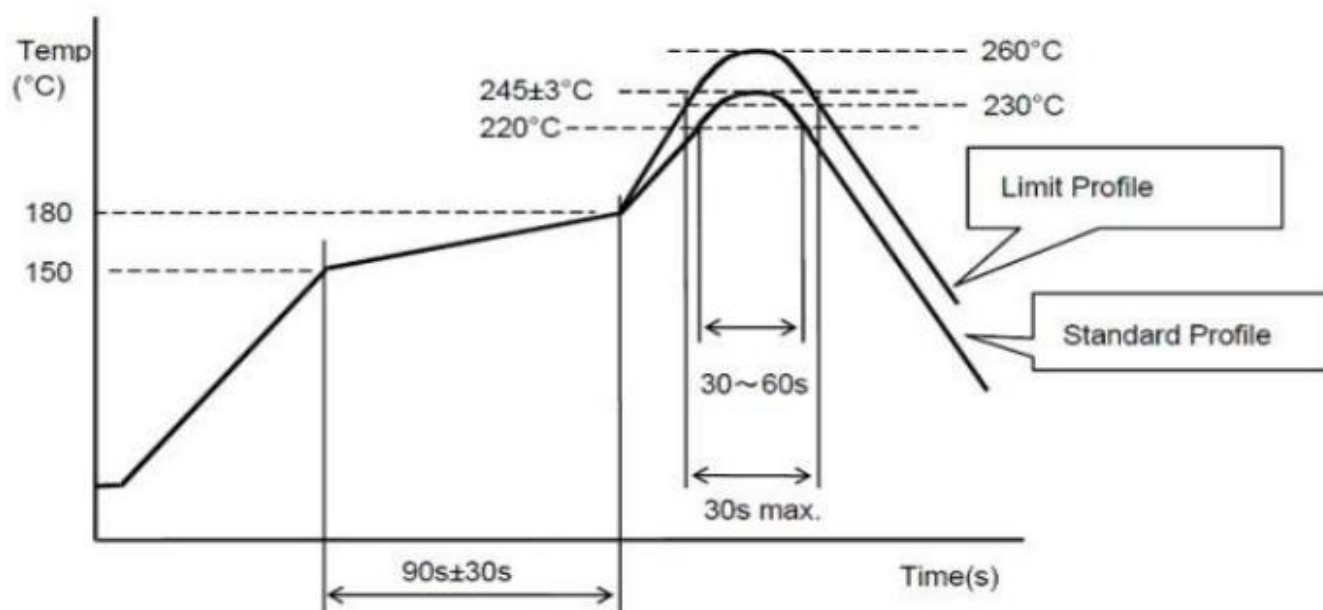
DCR GKT-502BC

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7.Recommended Soldering Conditions



	Standard Profile	Limit Profile
Pre-heating	150~180℃、90s±30s	
Heating	above 220℃、30s-60s	above 240℃、30s max
Peak temperature	$245^\circ\text{C} \pm 3^\circ\text{C}$	260°C 、10s
Cycle of reflow	2 times	2 times



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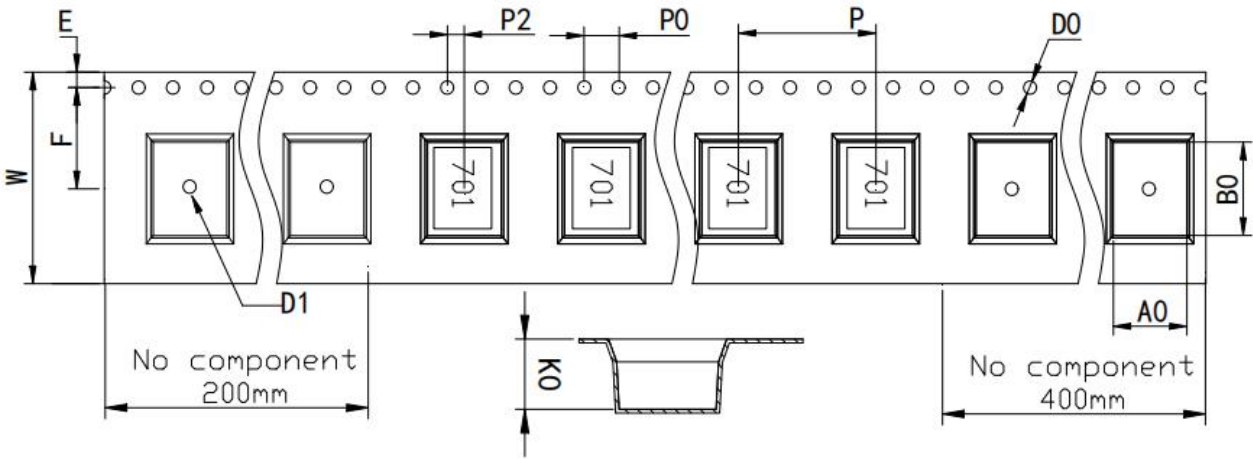
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8.Packaging

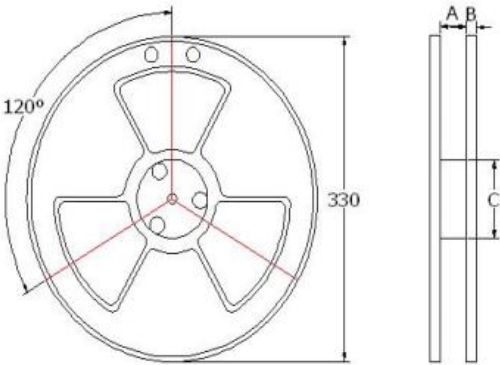
Carrier Tape (Unit:mm)



W=24.0
A0=11.3
B0=13.0
K0=6.6
P=16.0
P0=4.0
P2=2.0
F=11.5
E=1.75
D0=1.5
D1=1.5

透明载带+透明上带.

Reel (Unit:mm)



A=24.5
B=2.3
C=100

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(2) Packaging quantities

QTY

Reel(Pcs) 500

Middle Carton(Pcs) 500

Big Carton(Pcs) 2,500

N.W(Kg)

G.W(Kg)

9.Storage

(1) Storage period

Use the products within 12 months after delivered. Solderability should be checked if this period is exceeded.

(2) Storage conditions

●Storage temperature: $-40^{\circ}\text{C}\sim+125^{\circ}\text{C}$

●Storage environment: $0^{\circ}\text{C}\sim+40^{\circ}\text{C}$ humidity: RH10%~70%

(3) Delivery

Care should be taken when transporting or handling product to avoid excessive vibration or mechanical shock.