

PRODUCT SPECIFICATION

SPEC. NO: C-2604-05

DATE: Apr.1,2026

CUSTOMER'S PRODUCT NAME:

EMTEK PRODUCT NAME:

BCMF121006120M00

THIS SPECIFICATION IS:

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



SIGNATURE: _____ DATE: _____

NAME(PRINT): _____

TITLE: _____

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EMTEK CO., LTD.

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1. Features

- Effective for suppressing common mode noise and almost no effect for high speed differential data line.
- Ultra low profile (1.27x1.0x0.6mm).
- Ceramic multilayer type SMD component.
- Non-polarized product.
- It is a product conforming to RoHS directive.

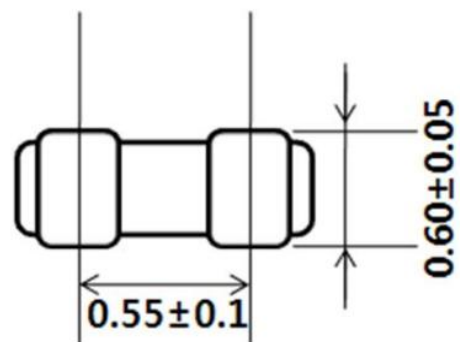
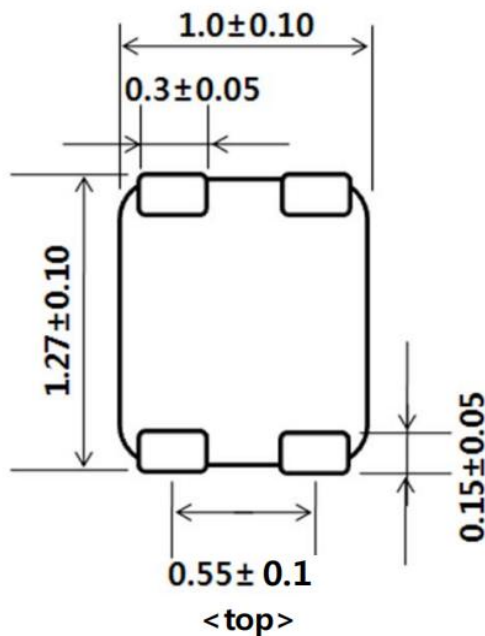
2. Application

- LVDS lines in notebook computers.
- USB2.0, IEEE1394, DVI in PDP, LCD TV, DVD Player, PC, Audio player, DSC

3. Part numbering

B	-	CMF	-	121006	-	120	-	M	-	00
Grade		Product Series		Dimensions(mm)		Impedance (Ω)		Tolerance		Control code

4. Appearance and Dimensions



Unit : mm

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5. Rating

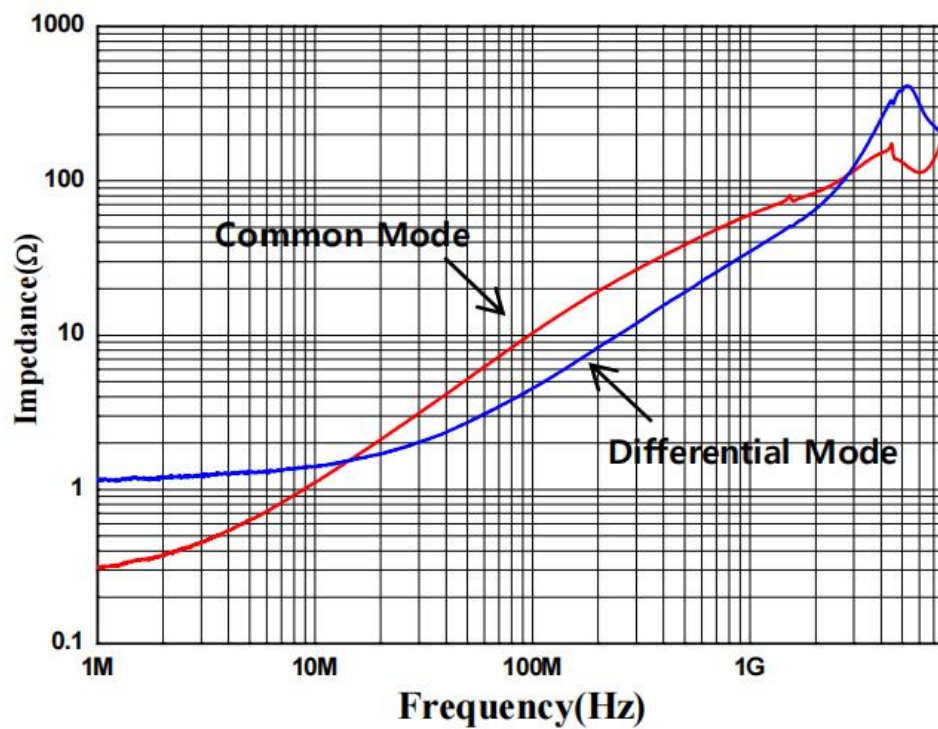
NOTE:

- Operating temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)	Test Freq	DCR (Ω)	Rated Current (mA)	Rated Voltage (V) Dc	Insulation Resistance (M Ω)
BCMF121006120M00	12 ($\pm 30\%$)	100MHz	Max 4.0	Max 100	10	Min 10

Typical Eleectrical Characteristics

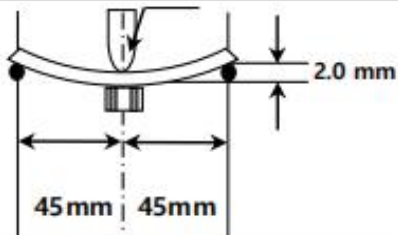
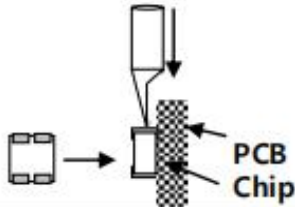


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6. Reliable Performance

No	ITEM	REQUIREMENT	TEST CONDITION
1	Reflow soldering-	- No mechanical damage. - More than 50% of the terminal Electrode shall be covered with new solder.	- Pre-heating temperature : 160 ~ 185°C time : 110 ±10 sec - Soldering temperature : max 260°C time : max 10sec.
2	Bending Strength test	- No mechanical damage. - Impedance change : within ±30%	
3	Adhesive strength of Terminal electrode	- Adhesion strength should be over 1.0kgf	
4	Thermal shock	- No mechanical damage. - Impedance change : within ±30%	Step 1 : -40 ±2°C 30 ±3min. Step 2 : 85 ±2°C 30 ±3min. Number of cycle : 100 cycles Then measured after exposure in the room condition for 24±2hrs
5	Heat Load resistance	- No mechanical damage. - Impedance change : within ±30%	Temperature : 85 ±2°C Applied Bias : Rated Current Time: 168hrs Then measured after exposure in the room condition for 24±2hrs
6	Humidity load resistance	- No mechanical damage. - Impedance change : within ±30%	Temperature : 85 ±2°C Humidity : 85%RH Applied Bias : Rated Current Time: 168hrs Then measured after exposure in the room condition for 24±2hrs
7	Low Temp. resistance	- No mechanical damage. - Impedance change : within ±30%	Temperature : -40 ±2°C Time: 168hrs Then measured after exposure in the room condition for 24±2hrs



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- Result

No	ITEM	REQUIREMENT	Sample Size	Result
1	Reflow soldering-	- No mechanical damage. - More than 50% of the terminal Electrode shall be covered with new solder.	10	OK
2	Bending Strength test	- No mechanical damage. - Impedance change : within $\pm 30\%$	10	OK
3	Adhesive strength of Terminal electrode	- Adhesion strength should be over 1.0kgf	10	OK
4	Thermal shock	- No mechanical damage. - Impedance change : within $\pm 30\%$	10	OK
5	Heat Load resistance	- No mechanical damage. - Impedance change : within $\pm 30\%$	10	OK
6	Humidity load resistance	- No mechanical damage. - Impedance change : within $\pm 30\%$	10	OK
7	Low Temp. resistance	- No mechanical damage. - Impedance change : within $\pm 30\%$	10	OK



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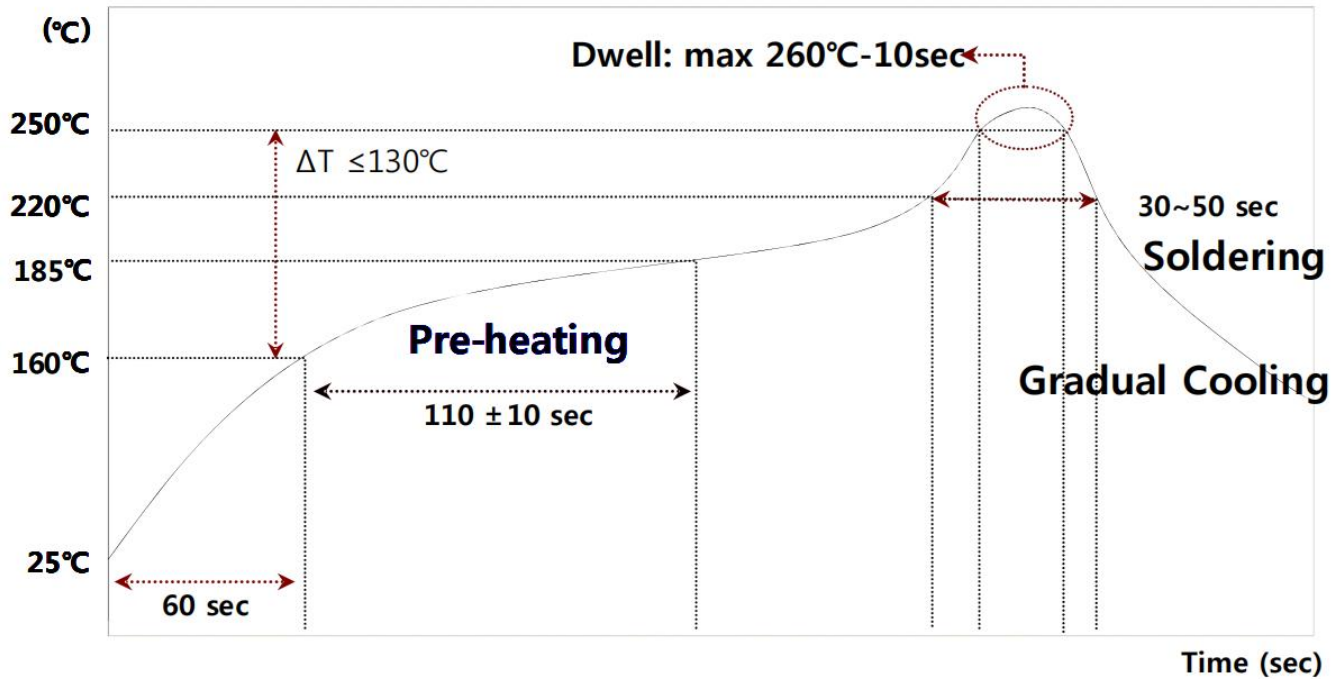
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7.Recommended Soldering Conditions

7.1 RECOMMENDED SOLDERING PROFILE (Lead-free condition)



7.2 RECOMMENDED LEAD-FREE SOLDER PASTE

- Supplier : Tamura Donghwa
- Main composition : Sn-Ag-Cu
- Ratio of composition : 96.5%-3.0%-0.5%

7.3 RECOMMENDED HAND SOLDER

- Max Temperature: Max 380 °C(Max 5sec)

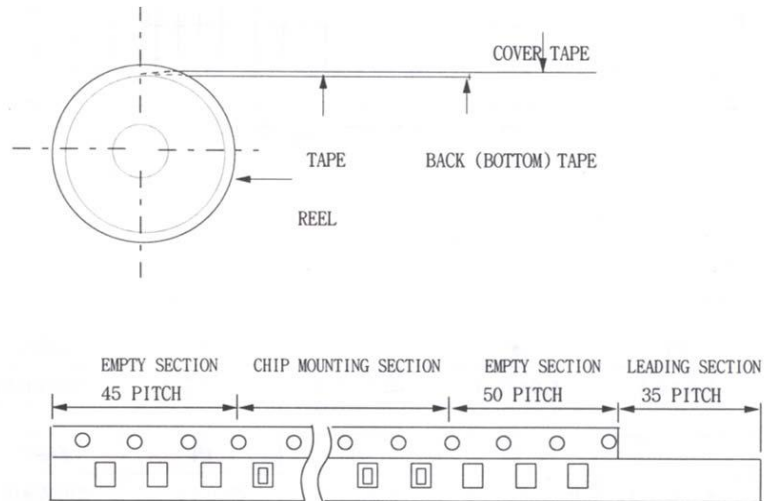
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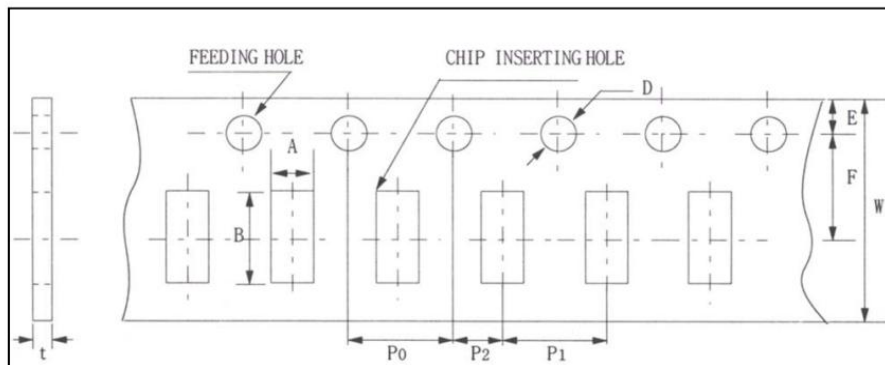
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8. Packaging

8.1 TAPING FIGURE



8.2 CARRIER TAPE DIMENSIONS



Unit : mm

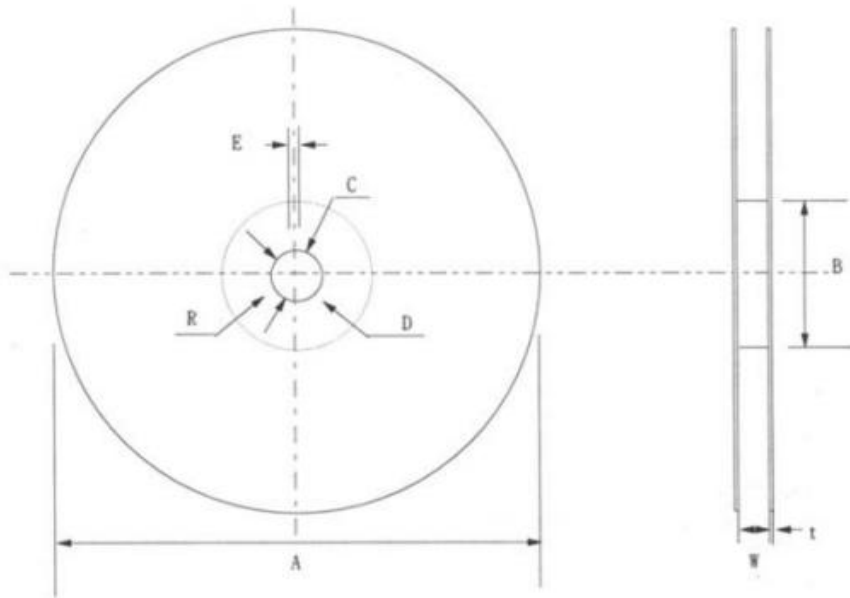
SYMBOL		A	B	W	F	E	P ₁	P ₂	P ₀	D	t
DIMENSION	11	1.15 ±0.05	1.5 ±0.05	8.0 +0.30 -0.10	3.5 ±0.05	1.75 ±0.05	4.0 ±0.10	2.0 ±0.05	4.0 ±0.10	1.55 ±0.03	0.75 ±0.05

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8.3 REEL DIMENSIONS



(1) Reel Materials: Polystyrene

(2) Label

CODE	A	B	C	D	E	W	t	R
DIMENSION	$\phi 178 \pm 2$	Min. $\phi 50$	$\phi 13 \pm 0.5$	$\phi 21 \pm 0.8$	2.0 ± 0.5	10 ± 1.5	0.8 ± 0.2	1.0

8.4 Packaging quantities

- Standard Packing Quantity per Reel ($\Phi 178$)

- Paper Tape: 4,000pcs

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9.Storage

(1) Storage period

Use the products within 24 months after delivered. Solderability should be checked if this period is exceeded.

(2) Storage conditions

●Storage temperature: 20~25℃

●Storage environment: 20~25℃ humidity: RH40%~60%

(3) Delivery

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

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