

PRODUCT SPECIFICATION

SPEC. NO: C-2604-02

DATE: Apr.1,2026

CUSTOMER'S PRODUCT NAME:

EMTEK PRODUCT NAME:

BCMF080605250M00

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 (0.87x0.67x0.47mm).
- Ceramic multilayer type SMD component.
- Non-polarized product.
- It is a product conforming to RoHS directive.

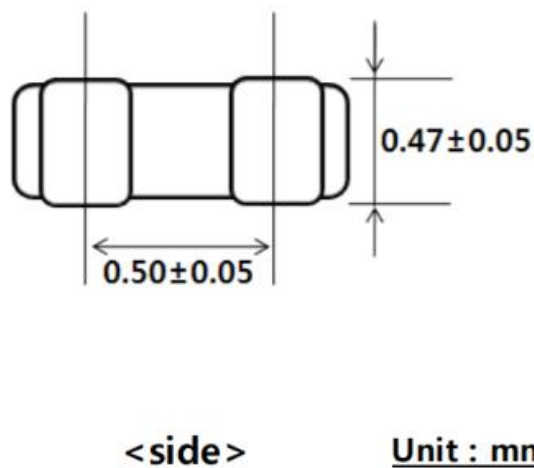
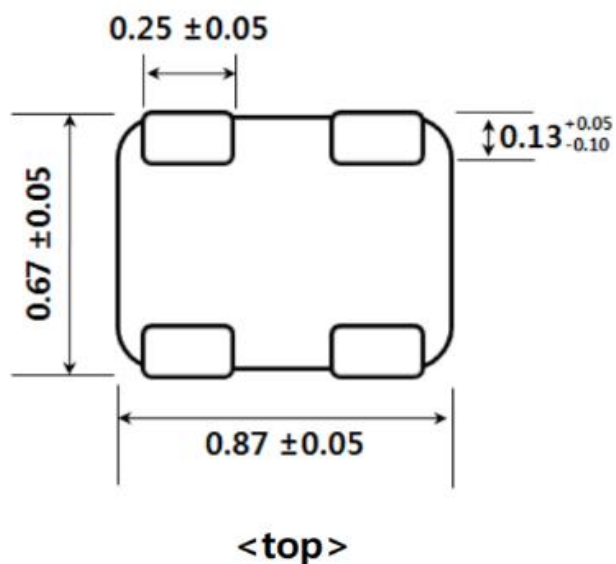
2. Application

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

3. Part numbering

B	-	CMF	-	080605	-	250	-	M	-	00
Grade		Product Series		Dimensions(mm)		Impedance (Ω)		Tolerance		Control code

4. Appearance and Dimensions



Unit : mm

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5. Rating

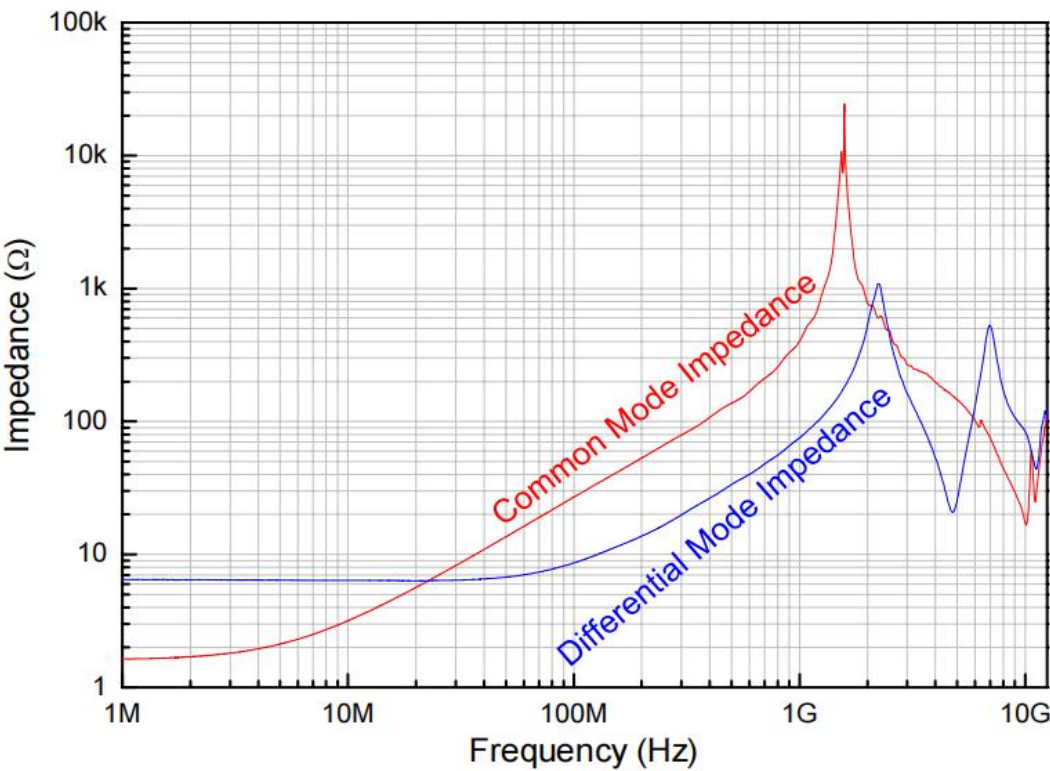
NOTE:

- Operating temperature: -40℃ ~ + 85℃

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)	Test Freq	DCR (Ω)	Rated Current (mA)	Rated Voltage (V) Dc	Insulation Resistance (MΩ)
BCMF080605250M00	25 (± 25%)	100MHz	Max 5.0	Max 100	5	Min 10

Typical Eleectrical Characteristics

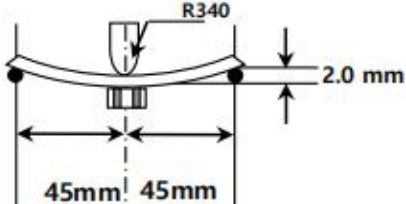
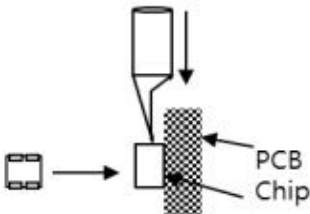


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6. Reliable Performance

No	Test	Requirement	Test Condition
1	Resistance to Soldering heat	- No mechanical damage. - More than 50% of the terminal Electrode shall be covered with new solder. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	- Pre-heating temperature : $175 \pm 10^\circ\text{C}$ time : 110 ± 10 sec - Soldering temperature : max 260°C time : max 10sec. - Time : 3 cycles.
2	Solderability	- No mechanical damage. - 90% or more of electrode area shall be coated by new solder.	- Pre-condition : 8hours steam age test - Temperature : $245 \pm 5^\circ\text{C}$ - Solder time : 5sec ± 1sec
3	Bending Strength test	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	
4	Adhesive strength of Terminal electrode	- Adhesion strength should be over 5N	
5	Drop test	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Height : 1.0m Plate : Concrete Time : 50 times
6	Vibration	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Frequency : 10 to 500 to 10Hz Amplitude : 1.5mm (peak-peak) Time : 6 hours (2 hours for each X,Y,Z)
7	High Temp. Storage	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Temperature : $125 \pm 2^\circ\text{C}$ Time: 1,000hrs Then measured after exposure in the room condition for 24 ± 2 hrs



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No	Test	Requirement	Test Condition
8	Low Temp. Storage	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Temperature : $-40 \pm 2^{\circ}\text{C}$ Time: 1,000hrs Then measured after exposure in the room condition for 24 ± 2 hrs
9	Damp Heat	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Temperature : $60 \pm 2^{\circ}\text{C}$ Humidity : 90%RH +5% -0% Time: 1,000hrs Then measured after exposure in the room condition for 24 ± 2 hrs
10	Thermal shock	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Step 1 : $-40 \pm 2^{\circ}\text{C}$ 30 ± 3 min. Step 2 : $125 \pm 2^{\circ}\text{C}$ 30 ± 3 min. Number of cycle : 100 cycle Then measured after exposure in the room condition for 24 ± 2 hrs
11	Heat load test	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	Temperature : $85 \pm 2^{\circ}\text{C}$ Applied current : Rated current Time : 1,000hrs Then measured after exposure in the room condition for 24 ± 2 hrs



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- Result

No	Test	Requirement	Sample size	Ac, Re	Result
1	Resistance to Soldering heat	- No mechanical damage. - More than 50% of the terminal Electrode shall be covered with new solder. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
2	Solderability	- No mechanical damage. - 95% or more of electrode area shall be coated by new solder.	77	0,1	OK
3	Bending Strength test	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
4	Adhesive strength of Terminal electrode	- Adhesion strength should be over 5N	77	0,1	OK
5	Drop test	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
6	Vibration	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
7	High Temp. Storage	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK



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No	Test	Requirement	Sample size	Ac, Re	Result
8	Low Temp. Storage	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
9	Damp Heat	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
10	Thermal shock	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK
11	Heat load test	- No mechanical damage. - Impedance change : within $\pm 30\%$ - DC Resistance change : within $\pm 20\%$	77	0,1	OK



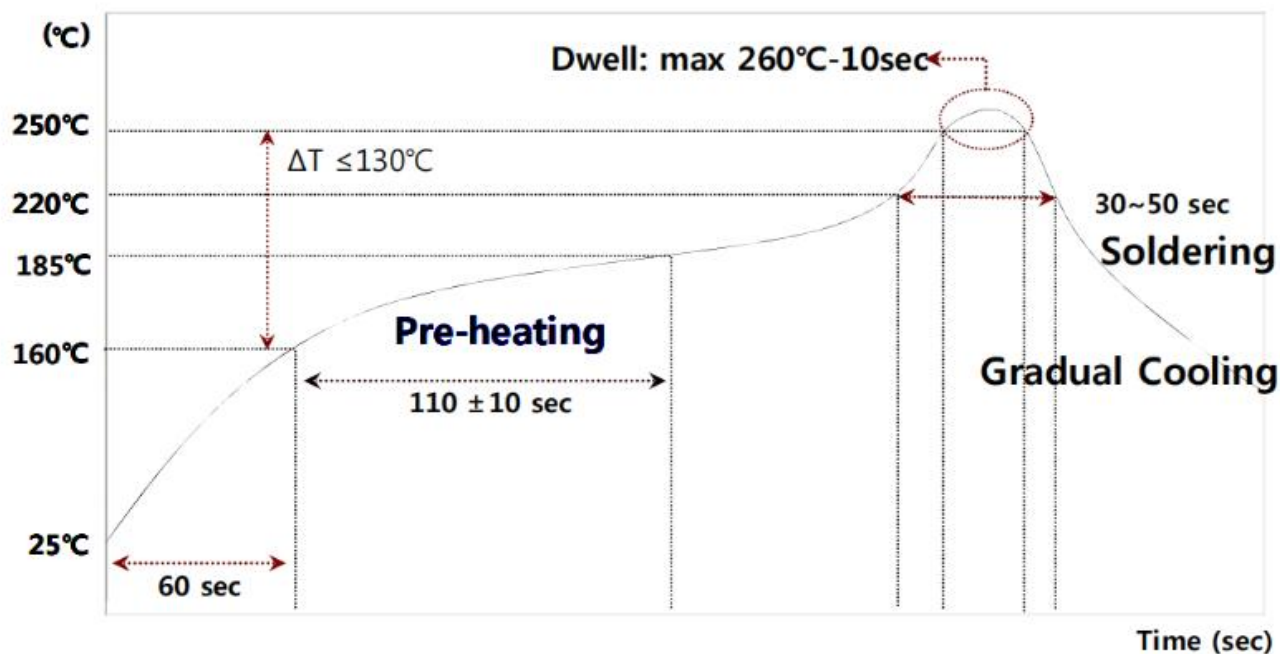
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7.Recommended Soldering Conditions

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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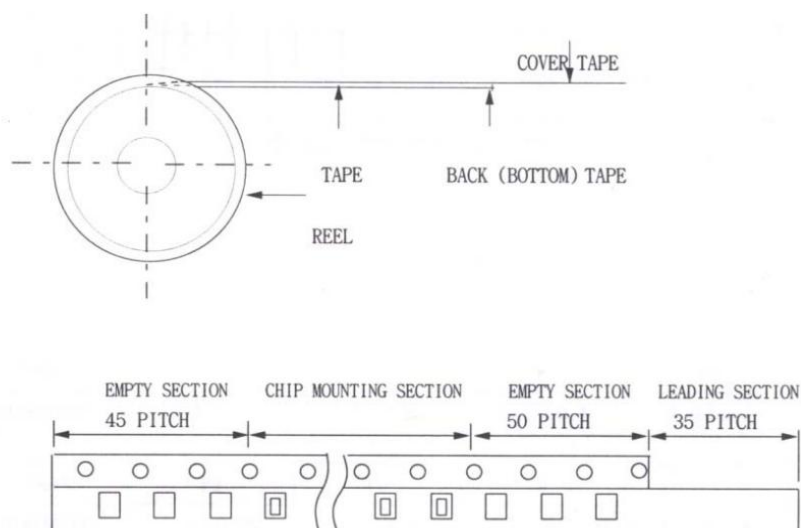
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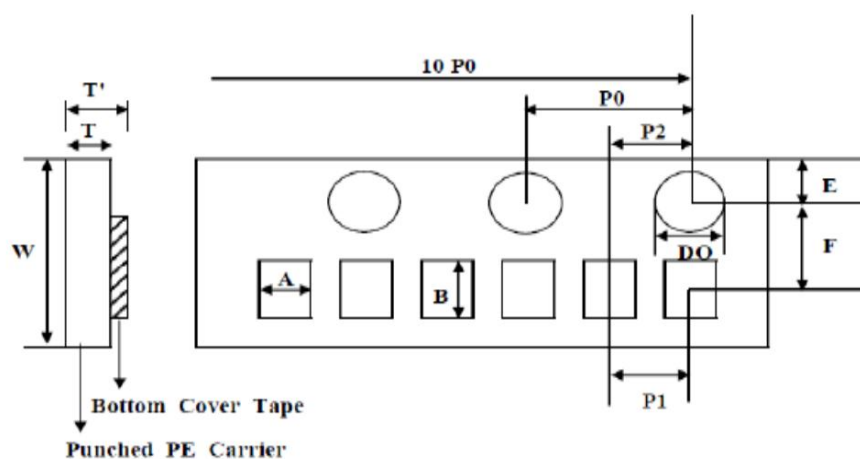
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8. Packaging

8.1 TAPING FIGURE



8.2 CARRIER TAPE DIMENSIONS



Unit : mm

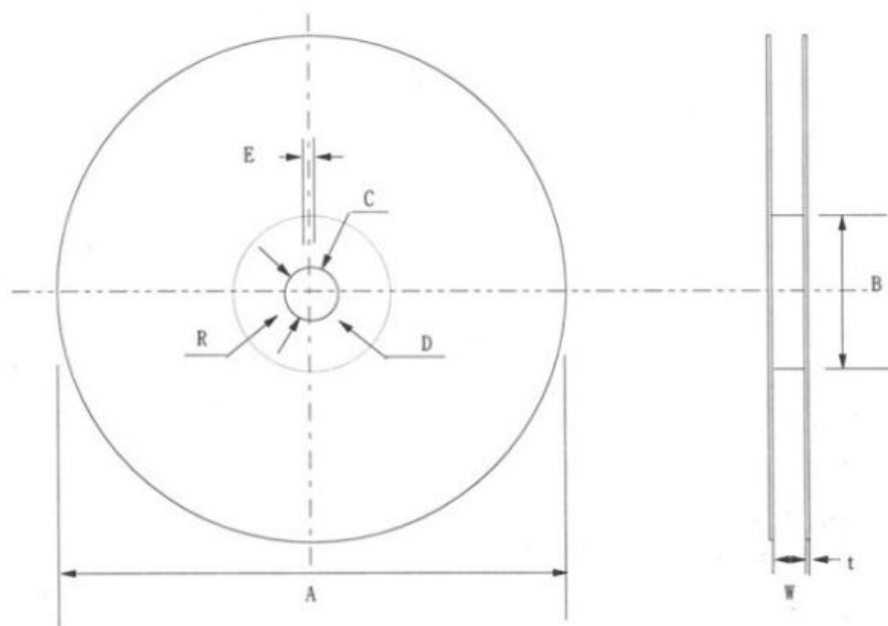
SYMBOL	A	B	E	F	D0	P1	P2	P0	10P0	W	T	T'
DIMENSION	0.80	1.02	1.75	3.50	1.55	2.00	2.00	4.00	40.00	8.00	0.60	0.63
TOLERANCE	±0.03	±0.03	±0.05	±0.05	±0.03	±0.05	±0.05	±0.05	±0.10	±0.10	±0.04	±0.03

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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: 10,000pcs



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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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