

Electret Condenser Microphone

Customer	
Customer P/O	
Customer Spec. No.	
Bestar Model Name	BCM9767P4.5-40
Product No.	1906010
Issue No.	BS/TEM01.062A
Issue Date	04/12/20

Approval:

- 1.Characteristic
- 2.Appearance
- 3.Environment Test

Prepared	Chec.	Appr.	Revision		
			No.	Date	Contents
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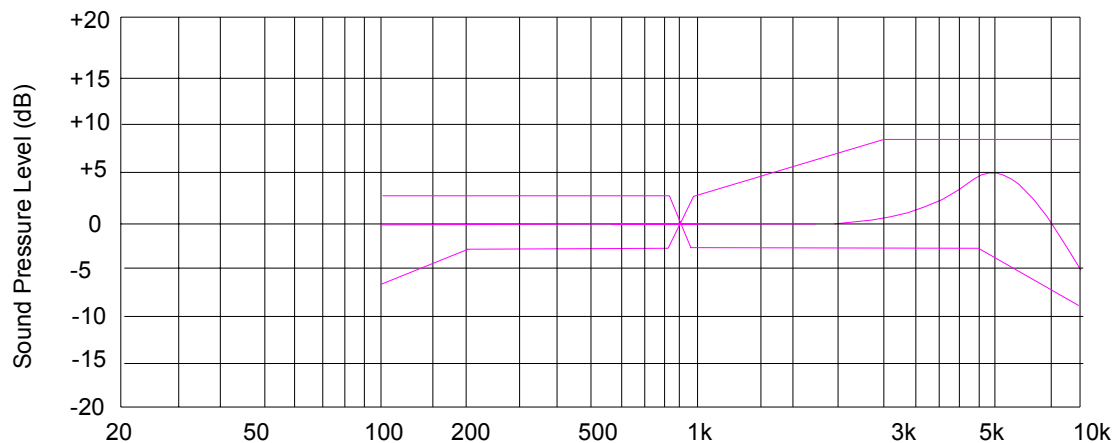
BCM9767P4.5-40

1. Characteristics

Test Condition (Vs=4.5V RL=1.0KΩ Ta=20℃ R.H.=50%)

No.	Item	Specifications
1	Sensitivity (dB)	-40± 3(0dB=1V/Pa,1kHz)
2	Output Impedance (Ω)	Max. 1000 at 1kHz
3	Current Consumption (mA)	0.5mA Max.
4	Voltage range (V)	1.1-10
5	S/N Ratio	60dB (A Curve)
6	Directivity	Omnidirectional
7	Decresing voltage	-3dB
8	Weight	≤ 1.0g
9	Operating Temperature	-20~+60℃
10	Storage Temperature	-25~+70℃

★Frequency Resonse Curve



Operating Voltage : 1.1V to 10V

Max. SPL :120dB

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3rd angle

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projection



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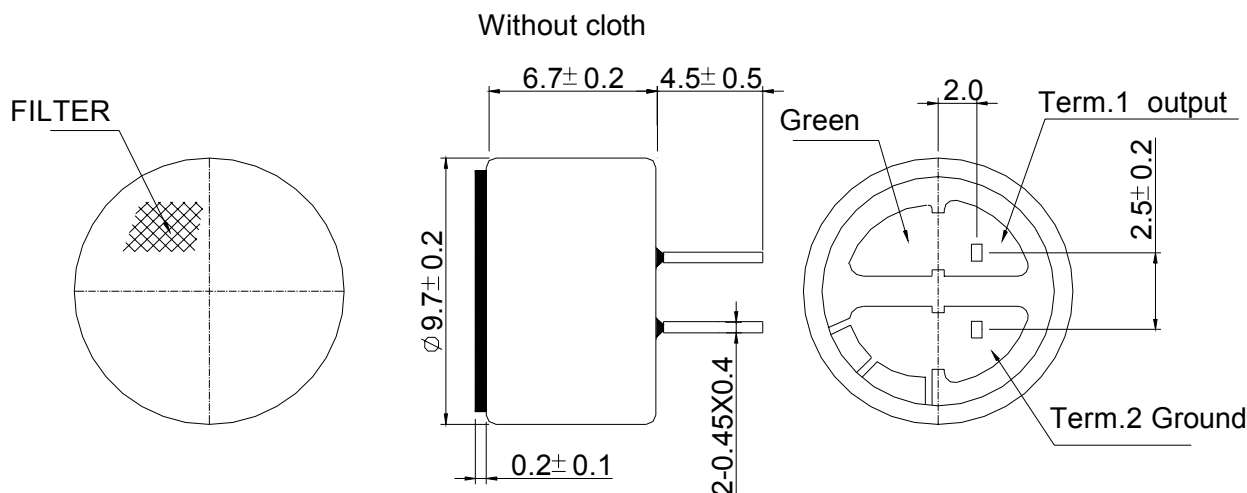
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BCM9767P4.5-40

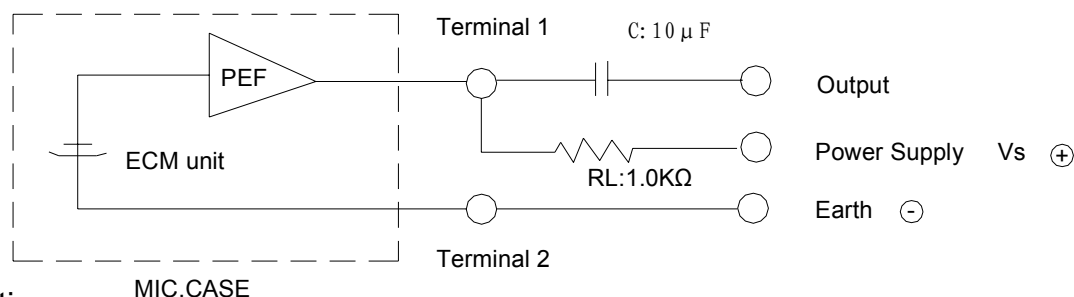
2.Appearance



Notes:

1. Not to scale
2. All dimensions are in millimeters
3. Item to be free of burrs and sharp edges

Measurement Circuit:



Cautions:

1. The constant temperature soldering iron of more than 60W shall be applied.
2. The temperature of the working surface of the soldering copper shall be below $270^{\circ}C$. If customer confirm to use lead-free soldering, the soldering temperature is $300^{\circ}C \pm 10^{\circ}C$ for 25 ± 0.5 seconds.
3. ECM shall be soldered fixed on the metal block (heat sink) which has the higher radiation effects said heat sink shall contact with each of ECM.
4. The soldering time for each terminal shall be 1~2 seconds.
5. The pin hole after soldering shall be avoided.
6. ECM may easily destroyed by the static electricity and the countermeasure for elimination the static electricity (the ground or soldering copper, for worktable and for human body) shall be executed.

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 BESTAR ELECTRONICS INDUSTRY CO., LTD TianAn Industry Park 4/F, Site B ChangZhou New District E-Mail: bestarco@pub.cz.jsinfo.net Http: www.be-star.com					DRG NO BS/TEM01.062A

BCM9767P4.5-40

3.Environment Test

3.1 High temp.life test

Temperature

+70℃

Duration

200hrs

3.2 Low temp.life test

Temperature

-25℃

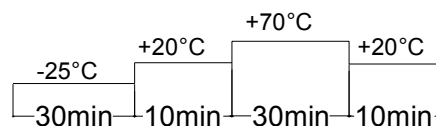
Duration

200hrs

3.3 Temperature cycle test

Cycles

5



3.4 Humidity Test

Temperature

+40℃

Relative Humidity

90~95%

Duration

200hrs

Tests above should be measured after leaving normal temperature for 2hrs.

3.5 Vibration Test

Vibration Frequency

10~55Hz

Amplitude

1.52mm/min

Direction

3(x.y&z)

Duration

2hrs each cycle(total 6 hrs)

3.6 Drop test

Height

100cm

(Dropped to concrete floor in state of packing.)

Direction

3

3.7 Soldering Heat Shock

Temperature

260℃ ± 5

Duration

2± 0.5 sec

3.8 Terminal Mechanical Strength

Strength

1kg

Duration

1 min

Notice:

All specifications must be satisfied in this condition.

Sensitivity :Allowable deviation within ± 3dB from initial sensitivity.

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3rd angle
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