



SPECIFICATION
FOR ELECTRET CONDENSER MICROPHONE

TOTAL PAGE

06

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RoHS

Customer		Model Name	BCM9750ULF-47
Customer P/N		Product No.	191801
Date	23 Mar. 09	Issue No.	BS/TEM01.101B
Page	01 of 06	Issue Date	09/03/23

Approval:

- 1.Characteristics
- 2.Drawing
- 3.Measurement Circuit
- 4.Reliability Test
- 5.Packing
- 6.History change record

Drawn by	Checked by	Approved by	Customer approved

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BCM9750ULF-47

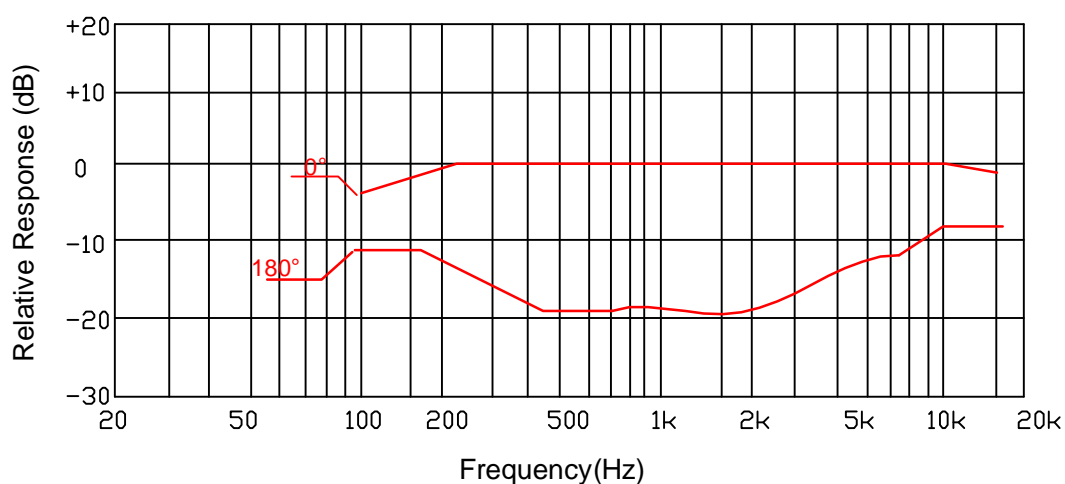


1. Characteristics

Test Condition ($V_s=1.5V$ $R_L=680\ \Omega$ $T_a=20^\circ C$ $R.H.=65\%$)

No.	Item	Specifications
1	Sensitivity	$-47 \pm 3dB(0dB=1V/Pa, 1kHz)$
2	Frequency Response	100Hz-16kHz
3	Current Consumption	0.5mA Max.
4	Directional	Unidirectional
5	S/N Ratio	more than 60dB
6	Standard Operating Voltage	1.5V
7	Operating Voltage	1V~10V
8	Sensitivity reduction	within -3dB at 1.5V
9	Distortion	2%
10	Storage Temperature	$-40^\circ C$ to $+70^\circ C$
11	Operating Temperature	$-30^\circ C$ to $+60^\circ C$

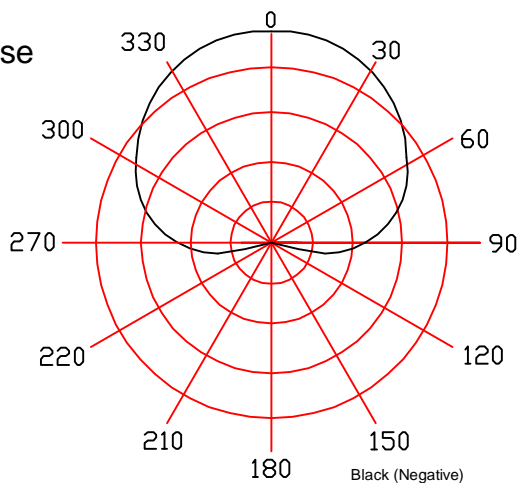
★Frequency Response Curve



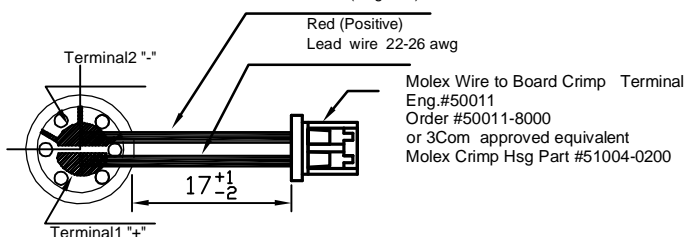
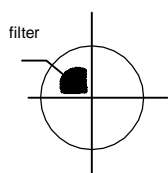
				Date:	09.03.23	BCM9750ULF-47
B	09.03.23	徐 波		Drawn by:	徐 波	
A	05.06.14	王丽娟		Checked by:	魏奉玲	Microphone
Rev.	Date	Drawn	Note	Approved by:	陶红仲	
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★ Angular Response

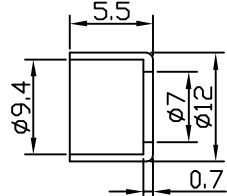


2. Drawing



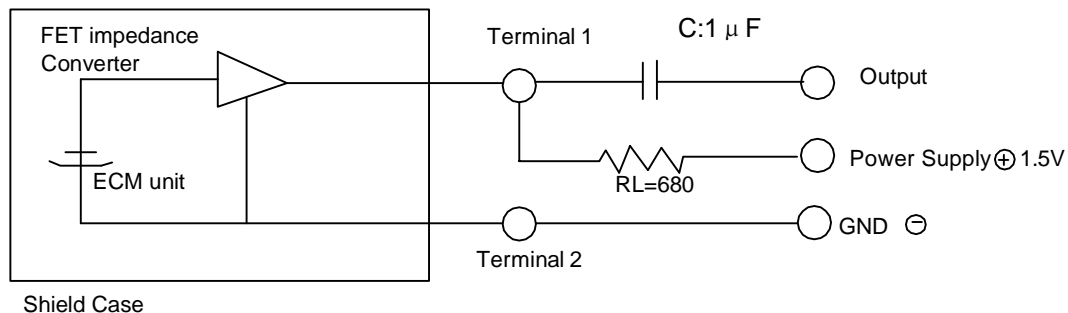
Molex Wire to Board Crimp Terminal
Eng.#50011
Order #50011-8000
or 3Com approved equivalent
Molex Crimp Hsg Part #51004-0200

rubber grommet for microphone cartridge



Side View of Connector

3. Measurement Circuit:



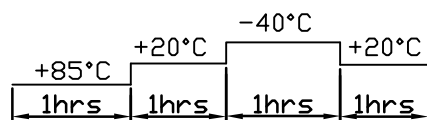
Shield Case

				Date:	09.03.23	BCM9750ULF-47	
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4. Reliability Test

- 4.1 High temp.life test
Temperature +85 °C
Duration 100hrs
- 4.2 Low temp.life test
Temperature -40 °C
Duration 100hrs
- 4.3 Temperature cycle test
Cycles 10



- 4.4 Humidity Test
Temperature +40 °C
Relative Humidity 90~95%
Duration 48hrs

Tests above should be measured after leaving normal temperature for 6hrs.

- 4.5 Vibration Test
Vibration Frequency 10~55Hz
Amplitude 1.52mm/min
Direction 3(x.y&z)
Duration 2hrs each cycle(total 6 hrs)
- 4.6 Drop test
Height 1m
(Dropped to 20mm thick hardwood board without packing.)
Direction 3
- 4.7 Soldering Heat Shock
Temperature 260 ±5° c
Duration 2 ±0.5 sec
- 4.8 Terminal Mechanical Strength
Strength 1kg
Duration 1 min

Notice:

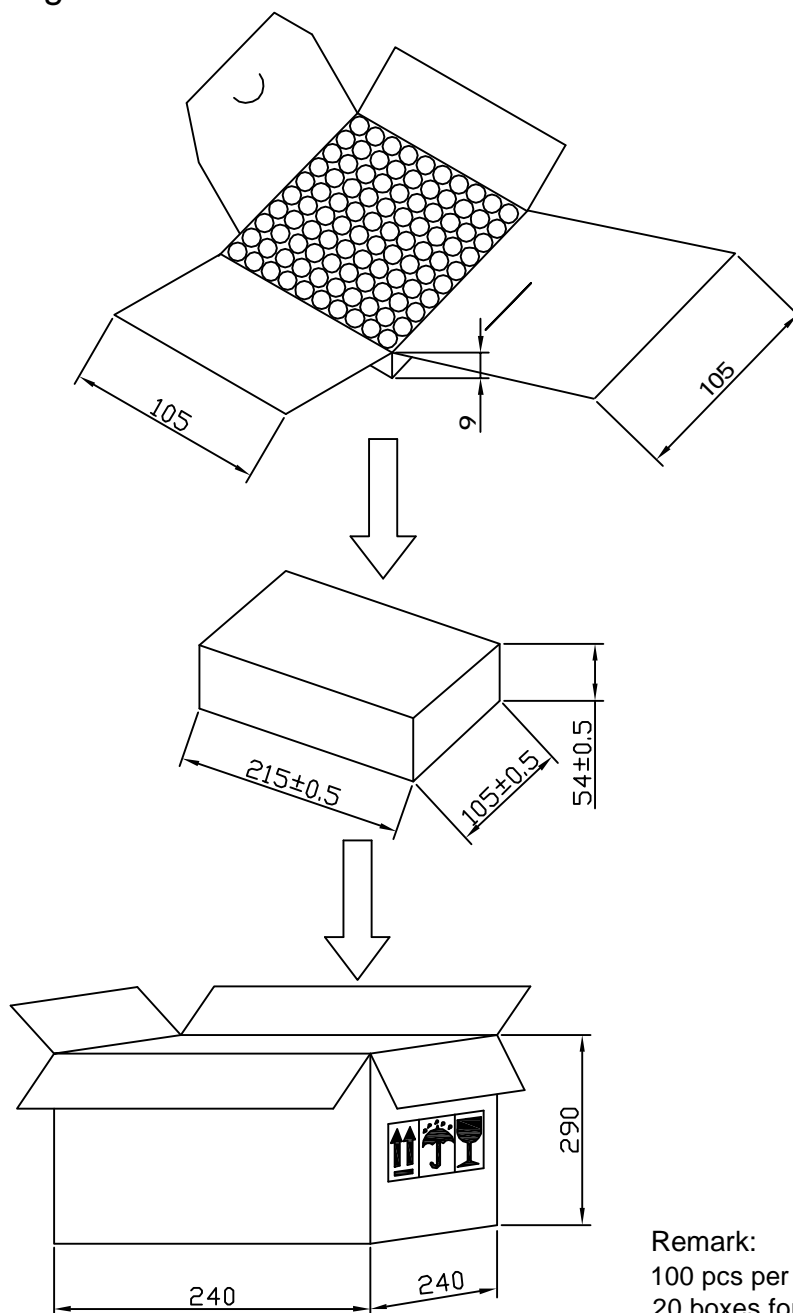
All specifications must be satisfied in this condition.

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

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5. Packing



Remark:
100 pcs per box
20 boxes for unit, 10 units per carton
Total 10000pcs per carton
Size: 24×24×29(cm)

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6. History change record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			05.06.14	王丽娟	郭 敏
B		add packing data	09.03.23	徐 波	陶红仲

				Date:	09.03.23	BCM9750ULF-47	
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