Features

- Electret condenser microphone
- Omni Directional
- PCB Pins
- Sensitivity -40dB
- Max. operating voltage 10V
- Diameter 6mm, Height 5mm

RS PRO Omni Directional Condenser Microphone 6mm, -40dB, PCB Pins

RS Stock No.: 0737624

RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

This 6mm diameter, omni directional electret microphone has a sensitivity rating of -40dB. Fixing is via PCB pins. Component microphones are widely used for audio recording, voice recognition and audio sensing products. Typical applications for electret condenser microphones include:

APPLICATIONS:

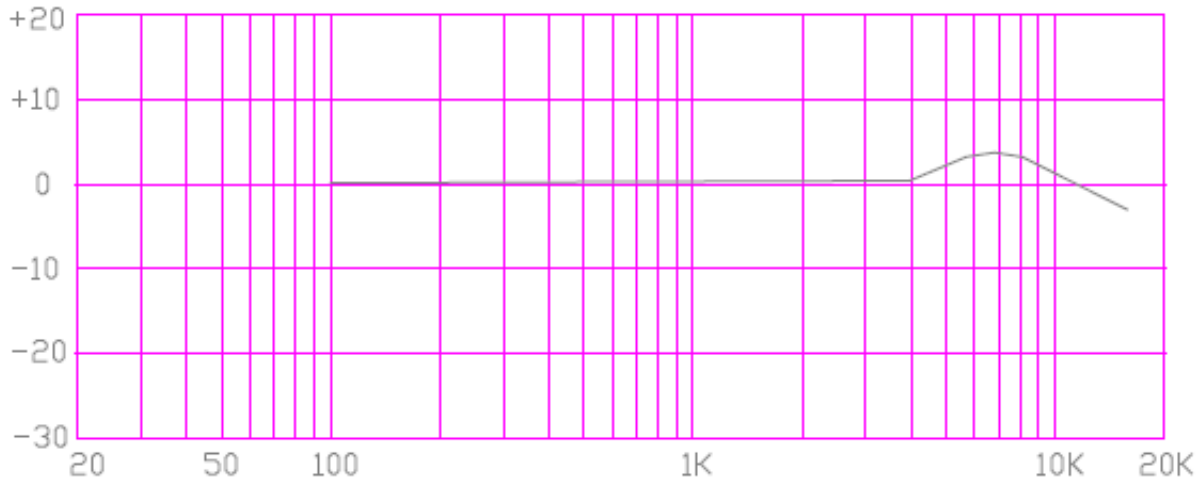
- Access & security
- Entry panels
- PDAs
- Consumer electronics
- Communications equipment
- Recording devices
- Telephones
- Hearing aids
- Computers

Electrical Specifications

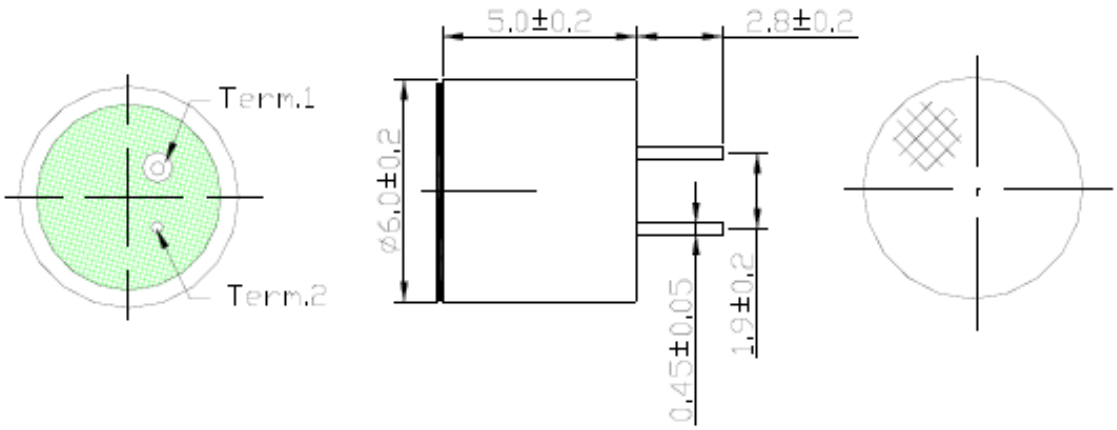
A.SPECIFICATION

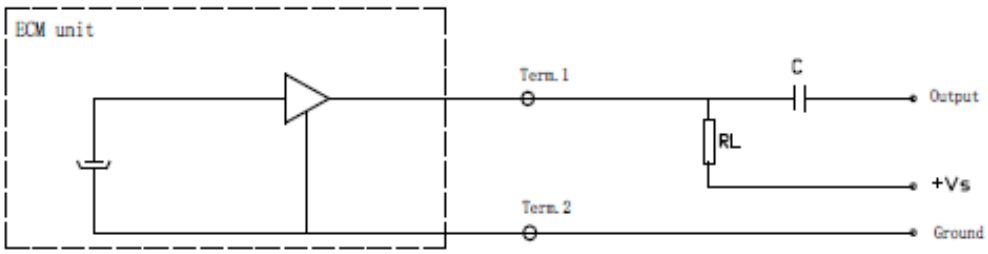
No.	Item	Unit	Specification	Condition
1	Directivity		Omni Directional	
2	Sensitivity	dB	-40±3dB	F=1KHz 0dB=1V/Pa
3	Standard operating voltage	V	2	
4	Output impedance	Ω	2.2K	F=1KHz 1Pa
5	Operating voltage range	V	1.5 - 10	
6	Sensitivity reduction	dB	-3	At 3.0V to 1.5V
7	Frequency	Hz	50~16000Hz	
8	Max.current consumption	mA	0.5	
9	Signal to noise ratio	dB	60	F=1KHz 1Pa A weighted
10	Storage temp	℃	-25℃~+70℃	
11	Operating temp	℃	-20℃~+60℃	
12	Dimension	mm	Φ6.0×5.0	See appearance drawing
13	Material		AL	
14	Terminal		PCB Pins	See appearance drawing

B.TYPICAL FREQUENCY RESPONSE CURVE



C.APPEARANCE DRAWING&MEASUREMENT CIRCUIT

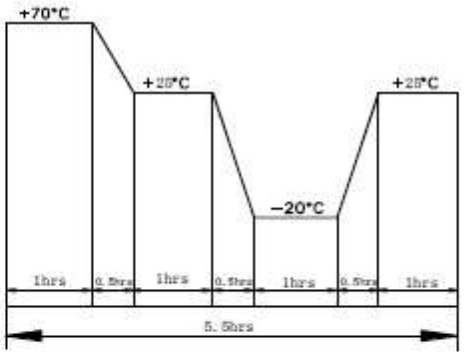




D. MECHANICAL CHARACTERISTICS

No.	Item	Test condition	Evaluation standard
1	Soldering Heat Resistance	Soldering iron of +330±5℃ should be placed on the terminal for 2±0.5 seconds.	No interference in operation
2	Vibration Test	The part shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours.	After any tests, the sensitivity to be within ±3dB of the initial sensitivity.
3	Drop Test	The microphone unit without packaged must be subjected to each 3 drops at three axises from the height of 1 meter to 20mm thick wooden board.	

E. ENVIRONMENTAL TEST

NO.	Item	Test conditions	Evaluation standard
1	High temp.test	After being placed in a chamber at +70℃ for 72 hours.	After any tests, the sensitivity to be within ±3dB of initial sensitivity after 6 hours of conditioning at +25℃
2	Low temp. test	After being placed in a chamber at -25℃ for 72 hours.	
3	Humidity test	After being placed in a chamber at +60℃and 90±5% relative humidity for 240 hours.	
4	Temp.cyle test	The part shall be subjected to 10 cycles. One cycle shall be consist of: 	

TEST CONDITION

Standard Test Condition: a)Temperature:+5~+35℃ b)Humidity:45-85% c)Pressure:860-1060mbar

Judgement Test Condition: a)Temperature:+25±5℃ b)Humidity:60-70% c)Pressure:860-1060mbar