

Condenser Electret Microphones



DESCRIPTION

A range of subminiature omni directional 9.8mm diameter electret microphone inserts.

DISTINCTIVE FEATURES

- Available with solder pads or with PCB pins
- 9.8mm diameter
- Signal to noise ratio >40dB
- Frequency range 50Hz to 12kHz
- Max input sound pressure 120dB SPL

APPLICATIONS

Suitable for Audio, consumer electronics & portable devices, where mounting to a PCB is required.

9.8mm
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Omni

4.5V



ELECTRICAL SPECIFICATION

Frequency response	50Hz to 12kHz
Impedance	1000 ohms +/- 30%.
Sensitivity	-60 ±3dB (OdB=1V/μ bar,1KHz, VCC=4.5V, RL=1KΩ)
Operating voltage	1.5V to 10V (standard voltage 4.5V)
Signal to noise ratio	>40dB
Current drain	0.5mA max
Maximum input sound pressure	120dB SPL



GENERAL SPECIFICATION

Microphone type	Electret
Directivity	Omni-Directional
Standard Voltage	4.5v
Height	6.8mm
RoHS Compliant	Yes



MATERIALS

Case Material	Aluminium
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ENVIRONMENTAL/OPERATING SPECIFICATION

Temperature test range	A) after exposure at 55° for 1 hour, sensitivity to be within 3dB from initial. B) After exposure at 10° for 1 hour, sensitivity to be within 3dB from initial. (The measurement to be done after 2 hours of conditioning at 25°C.)
Temperature cycle test	After exposure at: 10°C for 1hour, at 25°C for 1 hour, at 50°C for 1 hour, at 25°C for 2 hours, 4 cycles, sensitivity to be within +/-3dB. (After 2 hours of conditioning at 25°C)
Humidity test	After exposure at 40°C and 95% Rh for 48 hours, sensitivity to be within +/-3dB from initial. (After 1 hour of conditioning at 25°C.)
Vibration test	No effect on operation after vibration 12Hz to 50Hz for 1 minute full amplitude, for 1.5 Hour on 3 axes.
Drop test	To be no interference in operation after being dropped onto a concrete floor once on each face from 1 metre height
Soldering	Use 60W~90W soldering iron and maintain 350°C±20°C in operation. Soldering should be completed within two seconds at each terminal
Avoid creating a solder cavity or void around the lead area as this could alter the microphone's characteristics	



TERMINALS

Mounting Type	See part number table page 5
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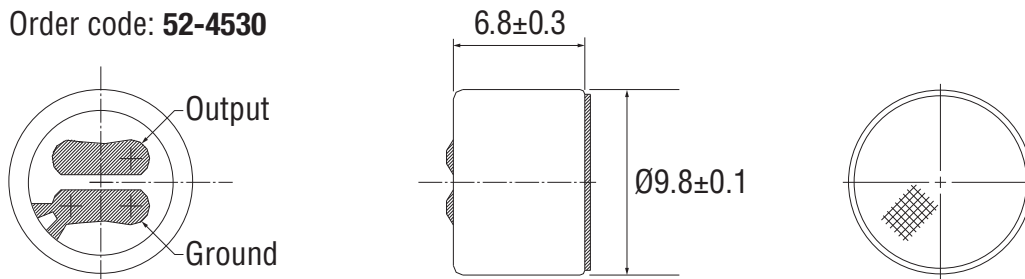


DIMENSIONS/DRAWINGS

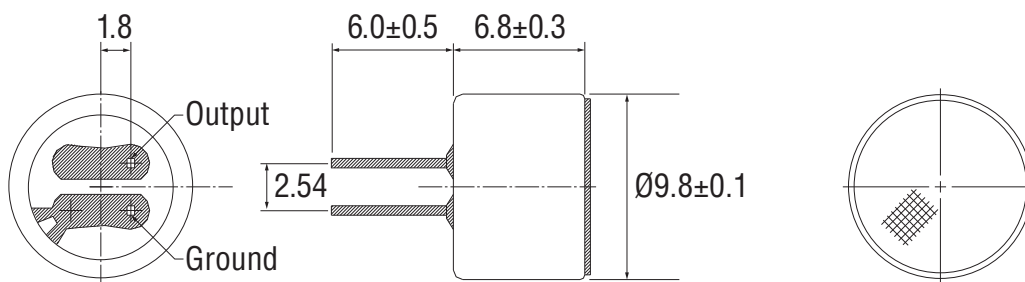
Units	mm - unless stated otherwise
Dimensions	9.8 x 6.8mm
Weight	See part number table page 5



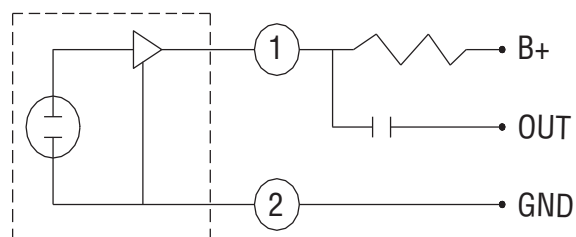
Order code: **52-4530**



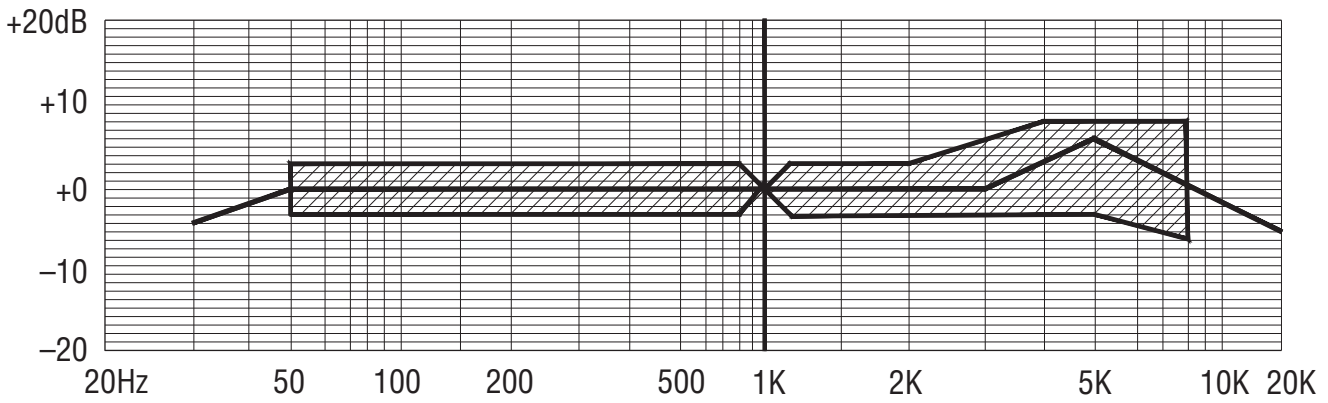
Order code: **52-4531**



Circuit Diagram



Typical Frequency Response Curve



PART NUMBER TABLE

Part Number	Mounting Type	Weight (grams)	UNSPSC	EAN	Country of Origin
52-4530	Solder pad	1	52161520	5053556005390	Taiwan
52-4531	PCB	1	52161520	5053556005406	Taiwan



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