### PANASONIC type WM, MICROPHONE INSERTS (Electret)

A comprehensive range of electret condenser microphones developed to meet the most exacting requirements of modern communication and audio designs. The devices are available with a wide choice of options including sizes, terminations, sensitivities and electrical characteristics.

- Choice of size and profile
- High quality
- Omni-directional (with noise cancelling versions also available)
- Wide selection of sensitivity
- Solder pad or pcb pin terminations


<table>
<thead>
<tr>
<th>Nom. Size (mm)</th>
<th>Terminations</th>
<th>Sensitivity (dB)</th>
<th>Impedance (Ω)</th>
<th>Directivity</th>
<th>Frequency Response (Hz)</th>
<th>Supply Voltage (V max.)</th>
<th>Current Drain (mA max.)</th>
<th>Sensitivity Reduction (db)</th>
<th>Signal/ Noise Ratio (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 x 2</td>
<td>Pins -44 ±3 2200 Omni-directional</td>
<td>20 - 16,000</td>
<td>2V</td>
<td>0.5</td>
<td>-3dB at 1.5V</td>
<td>&gt;60dB</td>
<td>WM-64PC 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 x 3</td>
<td>Pins -40 ±3 2200 Omni-directional</td>
<td>20 - 16,000</td>
<td>2V</td>
<td>0.5</td>
<td>-3dB at 1.5V</td>
<td>&gt;60dB</td>
<td>WM-64PCX 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 x 5</td>
<td>Pads -40 ±3 2200 Omni-directional</td>
<td>20 - 20,000</td>
<td>2V</td>
<td>0.5</td>
<td>-3dB at 1.5V</td>
<td>&gt;58dB</td>
<td>WM-60AY 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 x 5</td>
<td>Pins -40 ±2 3000 Omni-directional</td>
<td>20 - 16,000</td>
<td>2.5V</td>
<td>0.6</td>
<td>-3dB at 2V</td>
<td>&gt;60dB</td>
<td>WM-54BU 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 x 7</td>
<td>Pins -38 ±2 1500 Omni-directional</td>
<td>20 - 16,000</td>
<td>1.5V</td>
<td>0.3</td>
<td>-2dB at 1V</td>
<td>&gt;60dB</td>
<td>WM-034DBR 9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Schematic

![Schematic](image.png)

**Solder pad or pcb pin terminations**

Other types available to special order

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* at 50cm

† 0dB=1V/Pa, 1kHz

**ultra-miniature (6mm nom. dia.):**

- **WM-62PC**
- **WM-64PC**
- **WM-62CC**

**sub-miniature (10mm nom. dia.):**

- **WM-54BU**
- **WM-034DB**
- **WM-034FB**

For more information, visit [www.anglia.com](http://www.anglia.com) or contact info@anglia.com.
Diagram 1 – WM-62PC/WM-64PC

Dimensions (mm)

Diagram 2 – WM-62B

Dimensions (mm)

Diagram 3 – WM-62CC/WM-62A

Dimensions (mm)

Diagram 4 – WM-66D

Dimensions (mm)

Diagram 5 – WM-60A

Dimensions (mm)

Diagram 6 – WM-52B

Dimensions (mm)

Diagram 7 – WM-54B

Dimensions (mm)

Diagram 8 – WM-55D

Dimensions (mm)

Diagram 9 – WM-034DB

Dimensions (mm)

Diagram 10 – WM-034C/WM-034D

Dimensions (mm)

ULTRA-MINIATURE (6mm nom. dia.)

SUB-MINIATURE (10mm nom. dia.)
MAGNETONE type OEM, MICROPHONE INSERTS (Electret)

Omni-directional electret condenser microphone inserts available in two sizes: ultra-miniature, with a body diameter of 6mm and sub-miniature, with a body diameter of 9.7mm. Both sizes have the option of a standard or low profile body. Whilst all styles have solder pad terminations the sub-miniature size has an additional choice of termination method. All inserts are low impedance.

- Electret condenser microphone inserts
- Choice of size and profile
- Omni-directional
- Termination option on sub-miniature

N.B. Sensitivity figures shown on the following page are measured in ‘µbar’. To convert readings to ‘Pascal’ increase sensitivity by 20dB i.e. -58dB(0dB = 1V/µbar) = -38dB(0dB = 1V/Pa).
ULTRA-MINIATURE

Option of standard or low profile 6mm dia. body, both with solder pad terminations. PCB pin and wire lead terminations are available to special order as well as other sensitivity levels.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Figure</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency response</td>
<td>30Hz to 20kHz</td>
<td>VCC = 4.5V, RL = 2.2KΩ</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>-58dB ±2dB</td>
<td>0dB = 1V/μbar, 1kHz</td>
</tr>
<tr>
<td>Signal/noise ratio</td>
<td>&gt; 30dB</td>
<td>1kHz, 1mW, 3% distortion</td>
</tr>
<tr>
<td>Sound pressure (SPL)</td>
<td>105dB max.</td>
<td>1kHz, 1mW, 3% distortion</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>1.5V to 10Vdc</td>
<td>recommended voltage 4.5Vdc</td>
</tr>
<tr>
<td>Current drain</td>
<td>0.5mA max.</td>
<td></td>
</tr>
<tr>
<td>Oper. temp. range</td>
<td>-30°C to +80°C</td>
<td>(OEM601S) +60°C (OEM601SL)</td>
</tr>
</tbody>
</table>

SUB-MINIATURE

Option of standard or low profile 9.7mm dia. body, both with choice of terminations as detailed below. Other sensitivity levels are available to special order.

<table>
<thead>
<tr>
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<th>Figure</th>
<th>Conditions</th>
</tr>
</thead>
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<tr>
<td>Frequency response</td>
<td>30Hz to 16kHz</td>
<td>VCC = 4.5V, RL = 2.2KΩ</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>-58dB ±2dB</td>
<td>0dB = 1V/μbar, 1kHz</td>
</tr>
<tr>
<td>Signal/noise ratio</td>
<td>&gt; 40dB</td>
<td>1kHz, 1mW, 3% distortion</td>
</tr>
<tr>
<td>Sound pressure (SPL)</td>
<td>105dB max.</td>
<td>1kHz, 1mW, 3% distortion</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>1.5V to 10Vdc</td>
<td>recommended voltage 4.5Vdc</td>
</tr>
<tr>
<td>Current drain</td>
<td>0.8mA max.</td>
<td></td>
</tr>
<tr>
<td>Oper. temp. range</td>
<td>-30°C to +80°C</td>
<td>-30°C to +80°C</td>
</tr>
</tbody>
</table>

Termination Options

- Solder Pads
- PCB Pins
- Wire Leads

Dimensions (mm) & Connections

Manf. Part No. & anglia Order Code

Standard Low Profile

Terminations

Solder Pads

OEM601S OEM601SL