SERIES: CMS-16093-078X  |  DESCRIPTION: SPEAKER

FEATURES
• micro-speaker
• 8 Ω impedance
• rated 0.7 W
• 5 available termination options

SPECIFICATIONS

<table>
<thead>
<tr>
<th>parameter</th>
<th>conditions/description</th>
<th>min</th>
<th>typ</th>
<th>max</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>input power</td>
<td>max power: as per IEC-268-1, in 1 cc box</td>
<td>0.7</td>
<td>1.0</td>
<td></td>
<td>W</td>
</tr>
<tr>
<td>impedance</td>
<td>at 2.0 kHz, 2.37 Vrms, in 1 cc box</td>
<td>6.8</td>
<td>8</td>
<td>9.2</td>
<td>Ω</td>
</tr>
<tr>
<td>coil resistance</td>
<td>6.48</td>
<td>7.2</td>
<td>7.92</td>
<td></td>
<td>Ω</td>
</tr>
<tr>
<td>resonant frequency (Fo)</td>
<td>at 1.0 Vrms in free air, 10 cm</td>
<td>440</td>
<td>550</td>
<td>660</td>
<td>Hz</td>
</tr>
<tr>
<td></td>
<td>at 2.37 Vrms in 1 cc box, 10 cm</td>
<td>680</td>
<td>850</td>
<td>1,020</td>
<td>Hz</td>
</tr>
<tr>
<td>frequency response</td>
<td>100</td>
<td>20,000</td>
<td></td>
<td></td>
<td>Hz</td>
</tr>
<tr>
<td>sound pressure level</td>
<td>at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box</td>
<td>88</td>
<td>91</td>
<td>94</td>
<td>dB</td>
</tr>
<tr>
<td>distortion</td>
<td>at 800~1,200 Hz, 2.37 Vrms, 10 cm</td>
<td>15</td>
<td></td>
<td></td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>at 1,201~5,000 Hz, 2.37 Vrms, 10 cm</td>
<td>10</td>
<td></td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>buzz, rattle, etc.</td>
<td>must be normal at sine wave, 0.2~2 kHz, 1 cc box</td>
<td>2.37</td>
<td></td>
<td></td>
<td>Vrms</td>
</tr>
<tr>
<td>polarity</td>
<td>cone moves forward w/ positive dc current to “+” terminal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dimensions</td>
<td>16 x 9 x 3</td>
<td></td>
<td></td>
<td></td>
<td>mm</td>
</tr>
<tr>
<td>magnet</td>
<td>Nd-Fe-B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cone material</td>
<td>mylar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weight</td>
<td>1.3</td>
<td></td>
<td></td>
<td></td>
<td>g</td>
</tr>
<tr>
<td>operating temperature</td>
<td>-20</td>
<td>50</td>
<td></td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>storage temperature</td>
<td>-40</td>
<td>65</td>
<td></td>
<td></td>
<td>°C</td>
</tr>
<tr>
<td>hand soldering</td>
<td>for maximum 3 seconds (N/A for spring contacts)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoHS</td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1. All specifications measured at 15~35°C, humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

PART NUMBER KEY

CMS-16093-078 XX

Base Number

Termination Options:
S = spring contacts
SP = solder pads
L100 = wire leads, no connector
L100A = wire leads with Molex housing 51021-0200
L100B = wire leads with JST housing SHR-02V-S-B
MECHANICAL DRAWINGS

units: mm
tolerance: ±0.2 mm

SPRING CONTACTS

SOLDER PADS

Recommended Pad Layout

Additional Resources:  Product Page | 3D Model | PCB Footprint
MECHANICAL DRAWINGS (CONTINUED)

units: mm
tolerance: ±0.2 mm

WIRE LEADS, NO CONNECTOR
wire: UL 1571 32 AWG

WIRE LEADS WITH MOLEX CONNECTOR
wire: UL 1571 30 AWG
connector: Molex 51021-0200
mating connector: Molex 53261-0271

WIRE LEADS WITH JST CONNECTOR
wire: UL 1571 30 AWG
connector: JST SHR-02V-S-B
mating connector: JST BM02B-SRSS-TB

Additional Resources:  Product Page  |  3D Model  |  PCB Footprint
RESPONSE CURVES

**Frequency Response Curve**
Test Conditions: 2.37 Vrms / 10 cm in 1 cc box

**Total Harmonic Distortion Curve**
Test Conditions: 2.37 Vrms / 10 cm in 1 cc box
PACKAGING

units: mm

Tray Size: 290 x 215 mm
Tray QTY: 100 pcs per tray
Carton Size: 470 x 300 x 310 mm
Carton QTY: 5,000 pcs per carton

100PCS x 1 = 100PCS/tray

2500PCS x 2 = 5000PCS/box

ONE BUNDLE

BIG BOX

Additional Resources:    Product Page    |    3D Model    |    PCB Footprint
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