PRODUCT INFORMATION

PART #: CEPT390B200-612-34P145R  Revision: 0-2015

Piezoelectric Sound Transducer

**DESCRIPTION**
Challenge Electronics Piezoelectric Transducer; 39.0 mm Length; B style case (top port w/standoffs); 20.0 mm High; 6 to 12 Vp-p Operating Voltage; 3,400 Hz Resonant Frequency; minimum Sound output of 95 dB(A) min at 30 cm at Rated Voltage; Pin Termination 14.5 mm spaced, RoHS, Lead Free and REACH Compliance

**FEATURES**
- RoHS, Lead Free Compliant
- REACH Compliant
- ISO 9001 Certified

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage</td>
<td>6-12 Vp-p</td>
</tr>
<tr>
<td>Nominal Rated Voltage</td>
<td>9 Vp-p</td>
</tr>
<tr>
<td>Resonant Frequency</td>
<td>3400 ±500 Hz.</td>
</tr>
<tr>
<td>Sound Pressure Level</td>
<td>Minimum 95 dB(A), at: 30 cm, Resonant Frequency, Nominal rated Voltage, Square Wave 50% Duty Cycle</td>
</tr>
<tr>
<td>Operating Current</td>
<td>Maximum 20 mA, at: Resonant Frequency, Nominal rated Voltage, Square Wave</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-30°C to +70°C</td>
</tr>
<tr>
<td>Material</td>
<td>ABS757, or equal</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Termination</td>
<td>3-Pin: Beryllium Bronze ,Sn plated, 14.5 mm spaced (4.0 + 10.5 mm)</td>
</tr>
<tr>
<td>Physical Dimensions</td>
<td>Diameter (D): 39.0 mm ± 0.2 mm</td>
</tr>
<tr>
<td></td>
<td>Height (H): 20.0 mm ± 0.2 mm</td>
</tr>
<tr>
<td>Approximate Weight</td>
<td>12 grams</td>
</tr>
<tr>
<td>Removable Washing Label</td>
<td>No</td>
</tr>
<tr>
<td>Compliance</td>
<td>RoHS, Lead Free and REACH</td>
</tr>
<tr>
<td>Packaging</td>
<td>300 PCS/Carton</td>
</tr>
</tbody>
</table>

**RELIABILITY**

- Thermal Operating Temperature Test: 96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature
- Thermal Storage Temperature Test: 96 hours storage at Maximum Rated Storage Temperatures
- Thermal Shock Test: 5 cycles of Minimum and Maximum Operating Temperature
- Humidity Test: 140 Hours at +40°C±2°C, 90-95% RH
- Insulation Test: A minimum of 10 MΩ, measured with 100 Vdc Insulation Resistance Meter, between the Electrical Terminals and the Transducer Case
- Vibration Test: 2 Hours of at 1.5 mm with 10 to 55 Hz. vibration frequency to each of 3 perpendicular directions
- Termination Strength: Maximum of 9.8 N (1.0 Kg) load pull test, applied to each terminal in axial direction for 10 seconds
- Drop Test: Dropped naturally from 750 mm height onto the surface of 40 mm wooden board, 3 axes (X,Y,Z) directions, 3 times (9 times total)

**Warranty**
For a period of one (1) year from date of shipping under normal operations conditions.
This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair.

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ISO 9001:2008 Certified

CE-EG-04.400PT Piezoelectric PCB Sound Transducer

DIMENSIONS

Units in: mm Tolerance: ±0.2 mm

FREQUENCY RESPONSE CURVE

RECOMMENDED CIRCUIT DRIVE

1. Shelf life: Twelve (12) months when devices are to be stored in factory supplied unopened ESD moisture sensitive bag under maximum environmental conditions of 30°C, 70% R.H.

2. Exposure: Devices should not be exposed to high humidity high temperature environment. MSL (moisture sensitivity level) Class 2

SUBSTANCE OF VERY HIGH CONCERN

This product does NOT contain any of the REACH Substances of Very High Concern (SVHC), and is in compliance with European Union REACH Regulation No.1907/2006 regarding chemical substances which must be registered or disclosed.

PACKAGING

MARKING

Reel
Part Number
Quantity
Lot and/or Date Code
Box
Shipping Box
Dimensions
Part Number
Z cm
Customer PN (if required)
Quantity
Shipping Box
Lot and/or Date Code
PO Number
Dimensions
Net Weight
Z 28.0 cm
Gross Weight
Number of Boxes
10
Box Number of Boxes
Quantity
300
Approximate Weight
Kg
Made in
China

Revision
Description
By:
Date:

30PCS/box

300PCS/CTN