Air Ultrasonic Ceramic Transducers

400ST/R160

Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Transmitter</th>
<th>Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>400ST160</td>
<td>Center Frequency</td>
<td>40.0±1.0Khz</td>
<td></td>
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<tr>
<td>400SR160</td>
<td>Bandwidth (-6dB)</td>
<td>2.0Khz</td>
<td>2.5Khz</td>
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<tr>
<td></td>
<td>Transmitting Sound</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Pressure Level</td>
<td>120dB min.</td>
<td></td>
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<tr>
<td></td>
<td>Receiving Sensitivity</td>
<td>-65dB min.</td>
<td></td>
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<tr>
<td></td>
<td>Capacitance at 1Khz</td>
<td>±20%</td>
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<tr>
<td></td>
<td>Max. Driving Voltage (cont.)</td>
<td>20Vrms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Beam Angle -6dB</td>
<td>55° typical</td>
<td></td>
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<tr>
<td></td>
<td>Operation Temperature</td>
<td>-30 to 80°C</td>
<td></td>
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<tr>
<td></td>
<td>Storage Temperature</td>
<td>-40 to 85°C</td>
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All specification taken typical at 25°C
Closer frequency tolerance can be supplied upon request.

Models available:

1. 400ST/R160 Aluminum Housing
2. 400ST/R16B Black Al. Housing
3. 400ST/R16P Plastic Housing

Dimensions: dimensions are in mm

Impedance/Phase Angle vs. Frequency
Tested under 1Vrms Oscillation Level
400ST160 Impedance
400ST160 Phase
400SR160 Impedance
400SR160 Phase

Sensitivity/Sound Pressure Level
Tested under 10Vrms @30cm

Beam Angle: Tested at 40.0Khz frequency
Air Ultrasonic Ceramic Transducers

400SR160 Receiver

Sensitivity Variation vs. Loaded Resistor

Center Frequency Shift vs. Loaded Resistor

Sensitivity Variation vs. Temperature

Center Frequency Shift vs. Temperature

400ST160 Transmitter

SPL Variation vs. Driving Voltage

Center Frequency Shift vs. Driving Voltage

SPL Variation vs. Temperature

Center Frequency Shift vs. Temperature