MCUSD16A40S12R0

Applications:
This specification covers the ultrasonic ceramic transducers which are used for receiving and transmitting ultrasonic waves.
Applications include Burglar Alarms, Distance Measurement, Range Finders, Remote Controllers, Robotics, etc.

Features:
- Open structure and dual use
- Compact and light weight
- High sensitivity and sound pressure
- Less power consumption
- High reliability

Technical Terms:
- Construction: Open structure
- Using Method: Dual Use
- Centre Frequency: 40 ±1kKz
- Output Sound Pressure: min.110dB (40kHz) 0dB = 0.0002μbar
- Sensitivity at 40kHz: min.-65dB/V/ μbar
- Capacitance: 2,500pF ±25% at 1kHz
- Directivity: 50°
- Operating Temperature Range: -35°C to +85°C
- Storage Temperature Range: -35°C to +85°C
- Detectable Range: 0.7 to 18m
- Housing Material: Aluminium

Drawing:

Dimensions: Millimetres
Tolerance: ±0.5

Beam Pattern:

![Beam Pattern Graphs]

Test Circuit:

![Test Circuit Diagram]

OSC: Oscillator
F.C: Frequency Counter
U.S: Ultrasonic Sensor
S.C.M: Standard Cappacitor Microphone
Amp: Amplifier

Part Number Table

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>Transceiver, 40kHz, 16mm, Metal</td>
<td>MCUSD16A40S12RO</td>
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