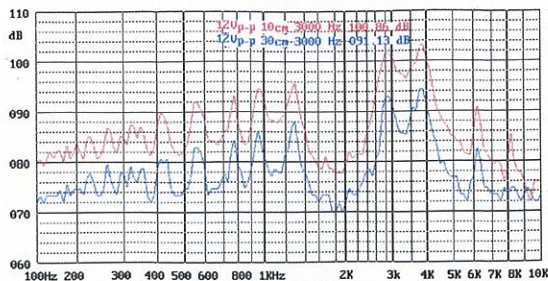


**SCOPE:** This specification applies to Piezo buzzer **TRTP-2335PCS**

**Frequency Response Curve**



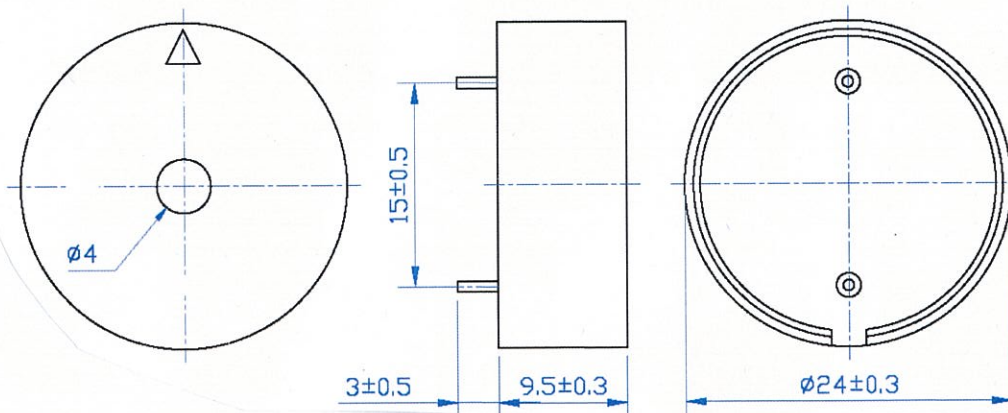
**Specification**

<b>Rated Voltage</b>	12 Vp-p square wave																		
<b>Operating Voltage</b>	1 ~ 30 Vp-p																		
<b>Operating Frequency</b>	3,000±500Hz																		
<b>Typical Sound Output</b>	90dB min. (102dB typ.) at 12Vp-p 10cm 3.0KHz 25 °C																		
<b>Rated Current</b>	8mA at 12Vp-p 3.0KHz 25 °C																		
<b>Capacitance</b>	25,000±30% pF at 100Hz 1Vrms																		
<b>Operating Temp.</b>	-40 °C to +95 °C																		
<b>Storage Temperature</b>	-40 °C to +105 °C																		
<b>Termination</b>	2 soldering pins, Sn plated Brass																		
<b>Construction Materials</b>	<table border="0"> <tr> <td><b>Description</b></td> <td>Maximum of 9.8N (1kgs) for 10 seconds load pull test</td> </tr> <tr> <td><b>Termination Strength</b></td> <td>Plastic, PPS A7-03 or equal</td> </tr> <tr> <td><b>Case</b></td> <td>Ni Alloy Disc N42 or equal</td> </tr> <tr> <td><b>Diaphragm</b></td> <td>3.4 g</td> </tr> </table>	<b>Description</b>	Maximum of 9.8N (1kgs) for 10 seconds load pull test	<b>Termination Strength</b>	Plastic, PPS A7-03 or equal	<b>Case</b>	Ni Alloy Disc N42 or equal	<b>Diaphragm</b>	3.4 g										
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<b>Weight (Typical)</b>	At 12 Vp-p in room temperature, continuously for 1000 hours																		
<b>Reliability</b>	<table border="0"> <tr> <td>*Life Test</td> <td>No function at +105±2 °C for 240 hours; Function at +95±2 °C for 240 hours</td> </tr> <tr> <td>*High Temperature</td> <td>No function at -40±2 °C for 240 hours; Function at -40±2 °C for 240 hours</td> </tr> <tr> <td>*Low Temperature</td> <td>+40±2 °C, 95±5%RH, 240 hours</td> </tr> <tr> <td>*Humidity</td> <td>-30±2 °C 0.5 hr → +25±2 °C 0.25 hr → +95±2 °C 0.5 hr → +25±2 °C 0.25 hr. Temperature Go up or Drop time is 0.5 hr. 3 hrs per 1 cycle. Total is 5 cycles</td> </tr> <tr> <td>*Thermal Shock</td> <td>1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours</td> </tr> <tr> <td>*Vibration</td> <td>980m/s<sup>2</sup> (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each</td> </tr> <tr> <td>*Shock</td> <td>Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions – upper and side of the part are applied</td> </tr> <tr> <td>*Drop Test</td> <td>Samples put through reflowing soldering oven 1 times</td> </tr> <tr> <td>*Soldering Heat Resistance</td> <td>For a period of one (1) year from date of manufacture under normal operations</td> </tr> </table>	*Life Test	No function at +105±2 °C for 240 hours; Function at +95±2 °C for 240 hours	*High Temperature	No function at -40±2 °C for 240 hours; Function at -40±2 °C for 240 hours	*Low Temperature	+40±2 °C, 95±5%RH, 240 hours	*Humidity	-30±2 °C 0.5 hr → +25±2 °C 0.25 hr → +95±2 °C 0.5 hr → +25±2 °C 0.25 hr. Temperature Go up or Drop time is 0.5 hr. 3 hrs per 1 cycle. Total is 5 cycles	*Thermal Shock	1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours	*Vibration	980m/s <sup>2</sup> (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each	*Shock	Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions – upper and side of the part are applied	*Drop Test	Samples put through reflowing soldering oven 1 times	*Soldering Heat Resistance	For a period of one (1) year from date of manufacture under normal operations
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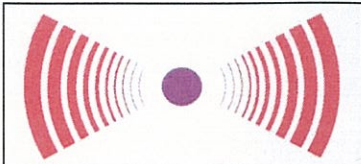
**Warranty**

\* All specifications must be satisfied after the test (Recovery:2 to 4 hrs of recovery under the standard condition after the removal from test chamber).

**Dimensions (Unit:mm)**



**Transducers USA**  
Confidential and Proprietary



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All dimensions are in MM unless otherwise specified

Drawing Number:  
**TRTP-2335PCS**

**External Piezo Buzzer**

Date:  
5/15/2017

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