

Magnetic-THT-Buzzer without oscillator

Electrical and Acoustical Parameter

Rated Voltage (Vpp)	1.5
Operating Voltage (Vpp)	1-2
Max. Current Consumption* (mA)	10
Coil Resistance ($\Omega \pm 7.5\Omega$)	50
Sound Pressure Level* (dBA @ 10cm)	min. 70
Resonance Frequency (Hz)	2.048

Remark: *Applying rated voltage (Resonant frequency, Square wave [50% duty cycle])

Mechanical, Environmental Parameter

Contact / Wire	Pin
Contact / Wire Plating	Tin plated brass
Operating Temperature (°C)	-20 - +70
Storage Temperature (°C)	-30 - +85
Housing Material	PPO
Housing Colour	black
Component Weight (g)	2.0

Remark:

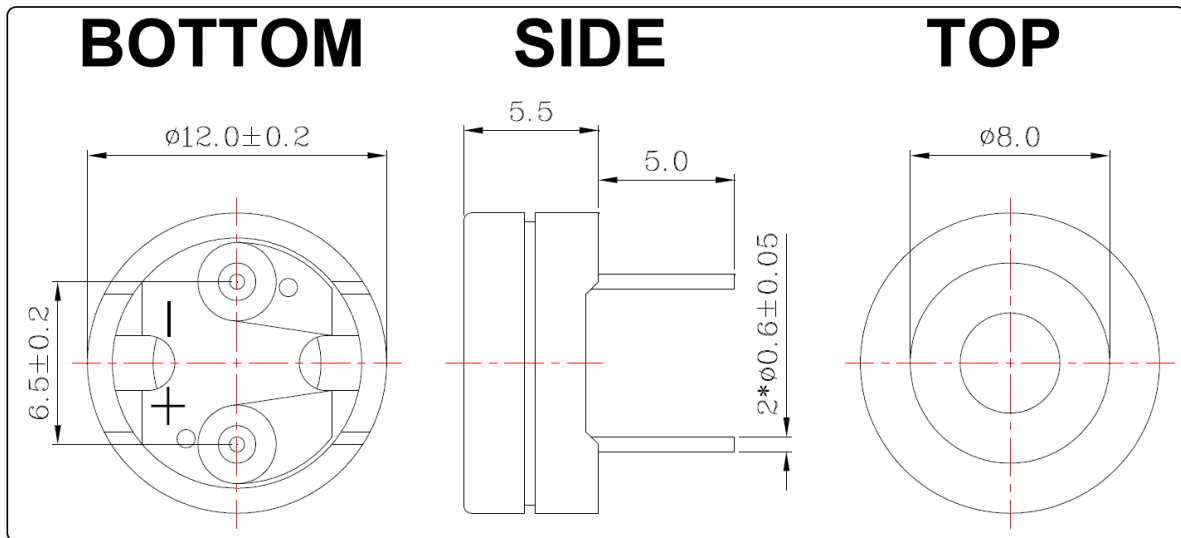
Approval

RoHs	<input checked="" type="checkbox"/>
REACH	<input checked="" type="checkbox"/>

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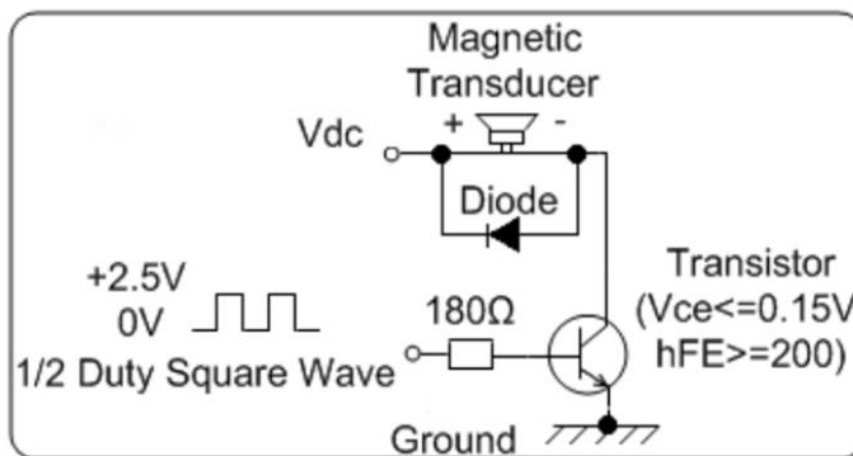
Drawing of Component

Unit: mm



Dimensions without tolerance ± 0.5 mm

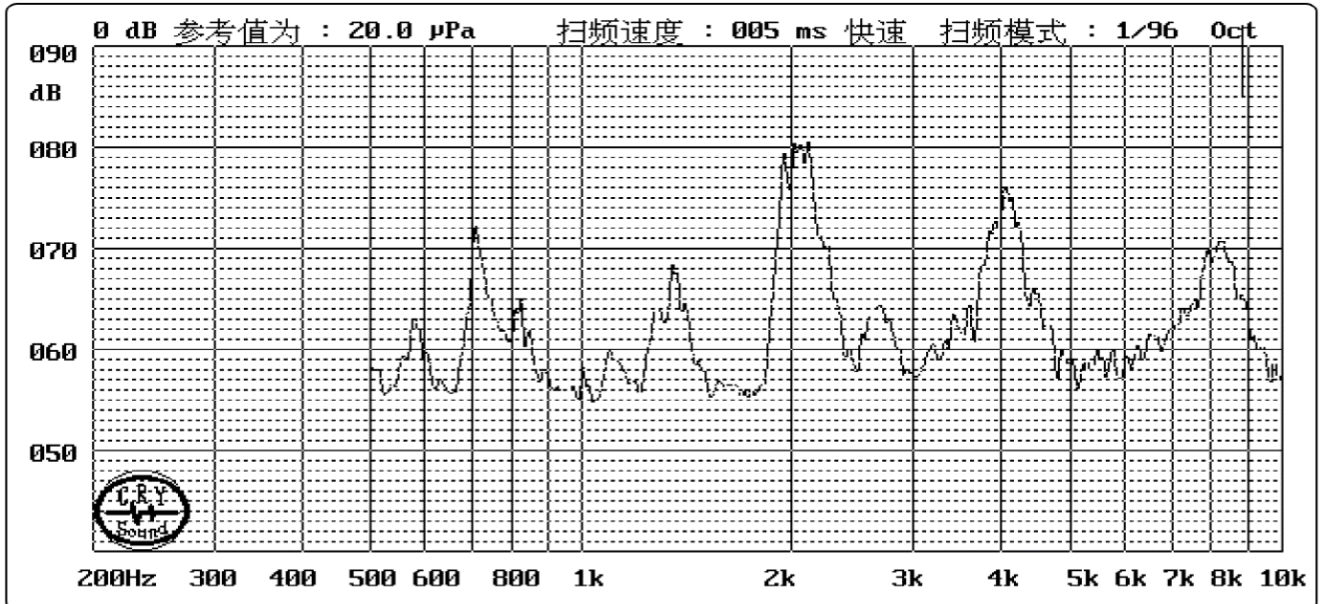
Recommended Circuit



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Schematic Diagrams and Characteristics

Typical Frequency Response



Test Method

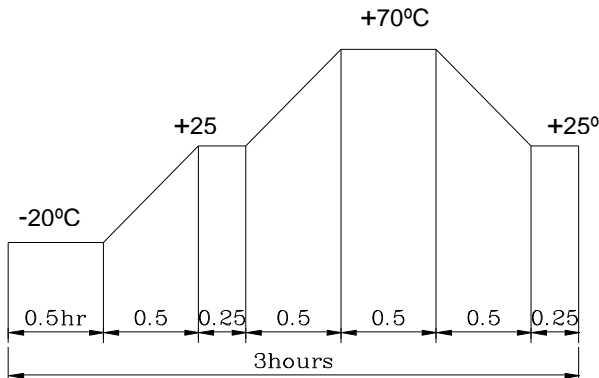
Standard Measurement conditions
 Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-65%

Acoustic Characteristics:
 The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below (Recommend Driving Circuit)

In the measuring test, buzzer is placed as follows:

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Reliability Test

NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with $85 \pm 2^\circ\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 5\text{dB}$.
2	Low Temperature Test (Storage)	After being placed in a chamber with $-30 \pm 2^\circ\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 5\text{dB}$.
3	Humidity Test	After being placed in a chamber with 90-95% R.H. at $40 \pm 2^\circ\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 5\text{dB}$.
4	Temperature Cycle Test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of :</p>  <p>The diagram shows a temperature cycle profile over a 3-hour period. It starts at -20°C for 0.5 hours, then ramps up to $+25^\circ\text{C}$ in 0.5 hours, holds at $+25^\circ\text{C}$ for 0.25 hours, ramps up to $+70^\circ\text{C}$ in 0.5 hours, holds at $+70^\circ\text{C}$ for 0.5 hours, ramps down to $+25^\circ\text{C}$ in 0.5 hours, holds at $+25^\circ\text{C}$ for 0.25 hours, and finally ramps down to -20°C in 0.5 hours. The total cycle time is 3 hours.</p> <p>Allowable variation of SPL after test: $\pm 5\text{dB}$.</p>
5	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm . Allowable variation of SPL after test: $\pm 5\text{dB}$.
6	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: $\pm 5\text{dB}$.
7	Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+300 \pm 5^\circ\text{C}$ for 3 ± 1 seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals).
8	Terminal Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

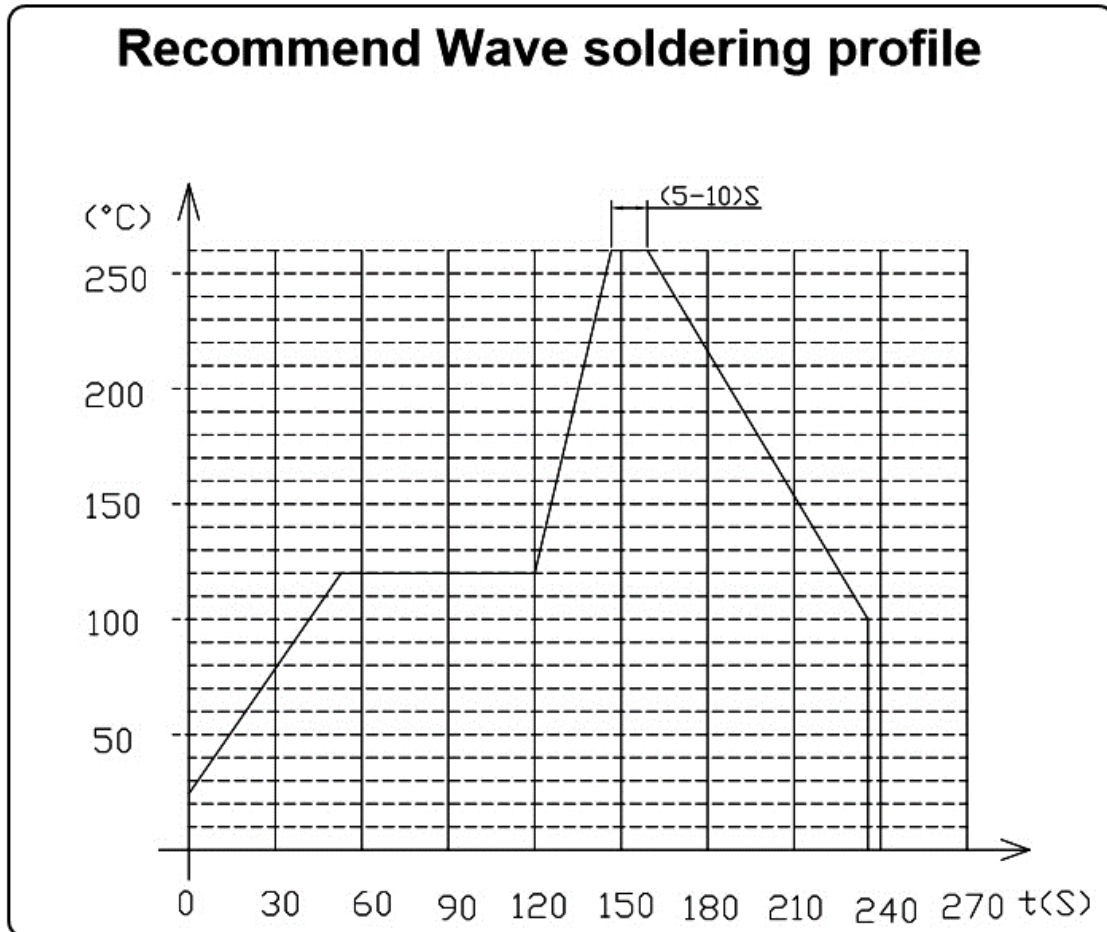
TEST CONDITION.

Standard Test Condition: a) Temperature : $+5 \sim +35^\circ\text{C}$ b) Humidity : 45-85% c) Pressure : 860-1060mbar
 Judgment Test Condition: a) Temperature : $+25 \pm 2^\circ\text{C}$ b) Humidity : 60-70% c) Pressure : 860-1060mbar

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Solder Profile

a) Wave Soldering Profile

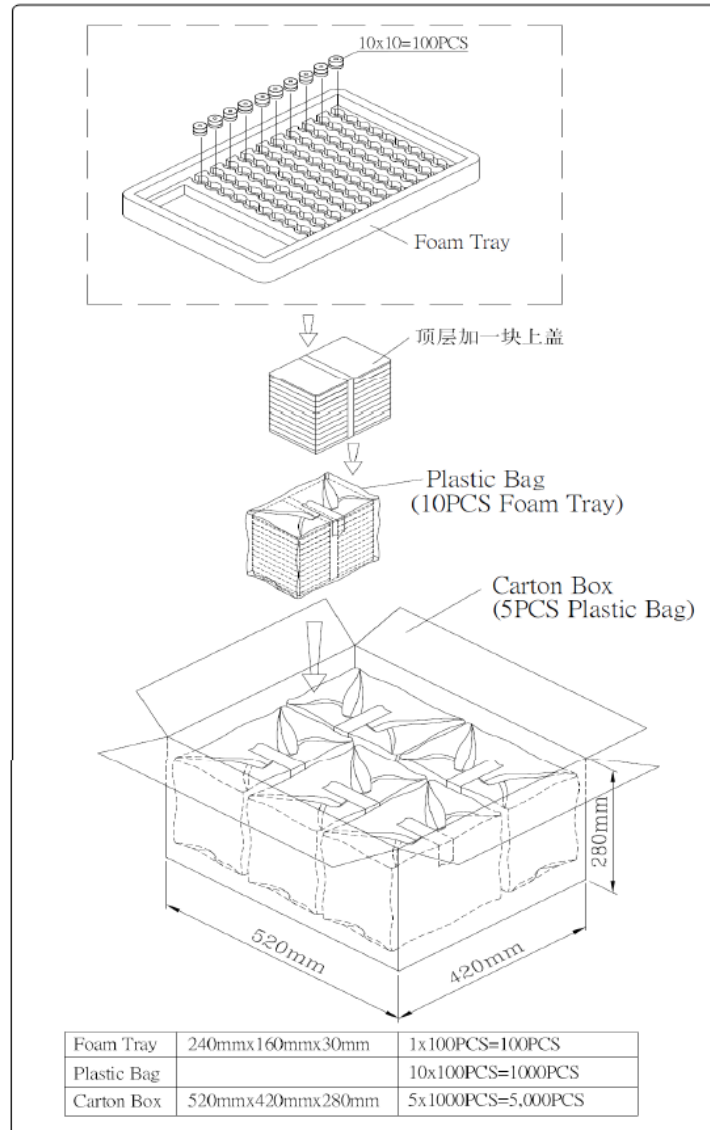


b) Manual Soldering Condition:

380 ± 20°C less than 2 seconds

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Packaging Information



Revision Table

Index Nr.	Reason - Procedure Change description	Date	Name	Comments
01	Update Reliability Test, Added: Soldering Profiles	12.12.2017	Uwe Bartsch	

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