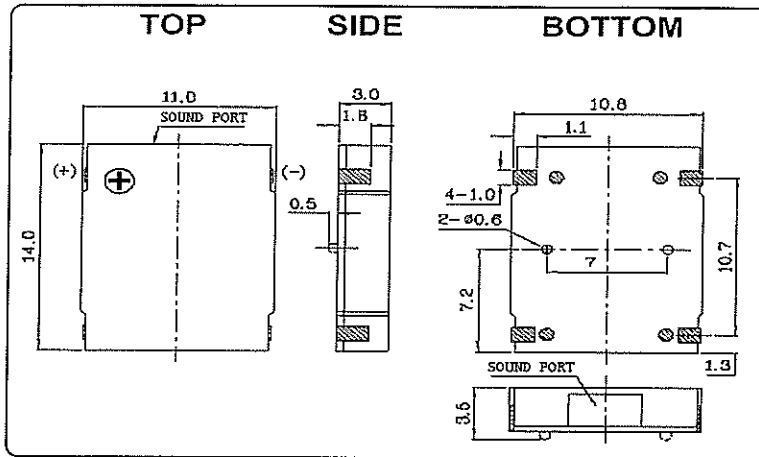


1. SPECIFICATIONS

| PARAMETERS | VALUES | UNITS |
|------------------------------------|------------|-------|
| *MIN SOUND PRESSURE LEVEL AT 10 CM | 87 | dBA |
| RATED VOLTAGE | 3 | Vo-p |
| OPERATING VOLTAGE | 2 - 4 | Vo-p |
| RESONANCE FREQUENCY | 3,200 | Hz |
| *MAX OPERATING CURRENT | 80 | mA |
| COIL RESISTANCE | 18 ± 3 | Ohm |
| OPERATING TEMPERATURE | -30 to +85 | °C |
| STORAGE TEMPERATURE | -40 to +90 | °C |
| HOUSING | LCP | - |
| WEIGHT | 1 | g |

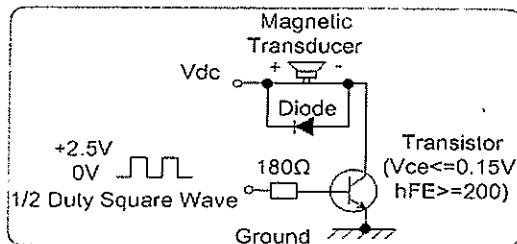
*Value applying rated voltage (1/2 duty square wave, resonance frequency)

2. DIMENSIONS (unit in mm)

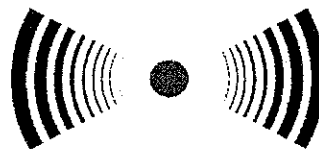


Tolerance: ±0.5mm except specified

3. RECOMMENDED CIRCUIT



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1400 Howard Street
Elk Grove, IL 60007
Toll Free: 800-956-1920 FAX: 847-956-1950
www.tusainc.com info@tusainc.com

All dimensions are in MM unless otherwise specified

Drawing Number:
TRSTP-1117

Title:
**SMT Audio Indicator
SIDE PORT**

Date:
12/24/2010

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4. RELIABILITY TEST

a) HIGH TEMPERATURE TEST

After exposure at $+80 \pm 2^\circ\text{C}$ for 96 hours and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

b) LOW TEMPERATURE TEST

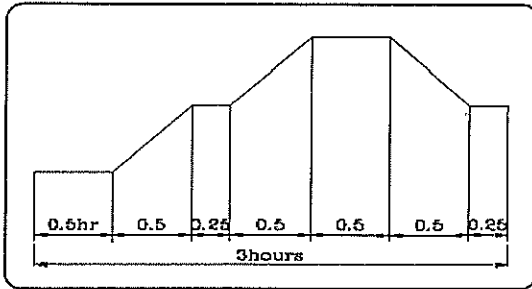
After exposure at $-30 \pm 2^\circ\text{C}$ for 96 hours and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

c) 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.

d) THERMAL SHOCK TEST

The part shall be subjected to 5 cycles. One cycle shall be consist of :



e) 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.

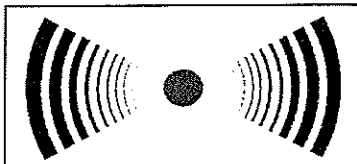
f) DROP TEST

Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm .

g) SOLDERABILITY

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).

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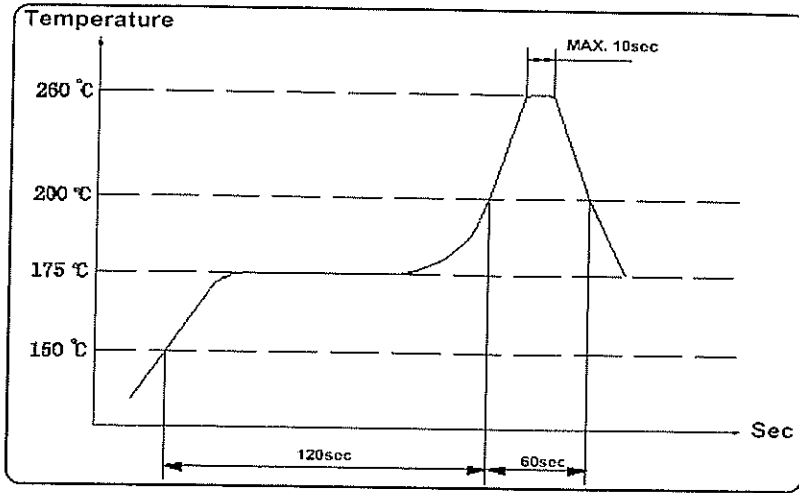
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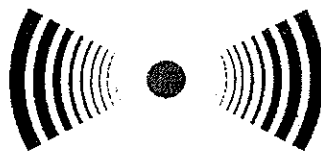
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12/24/2010

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5. RECOMMENDED REFLOWING PROFILE



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