

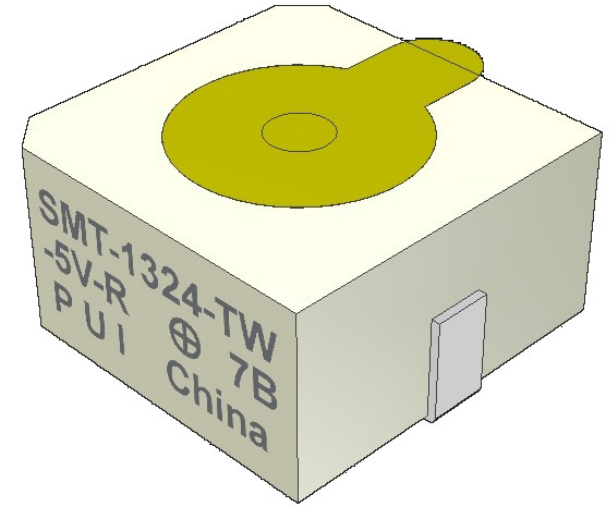


pui
audio™ inc
a projects unlimited company

SMT-1324-TW-5V-R

12.5x12.5mm

Transducer

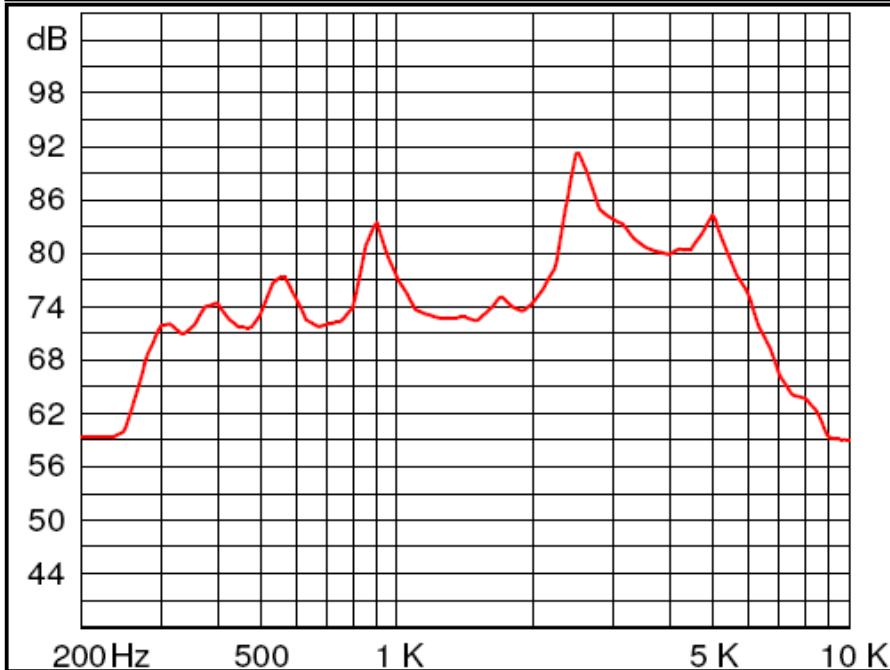


3541 Stop Eight Road • Dayton, Ohio 45414

Product Overview

- Top-firing electromechanical transducer designed for 4 to 8 Vp-p
- Small footprint with loud 85 dB output
- 2,400 Hz resonant frequency targets most sensitive region of human hearing
- Designed for reflow soldering with a lead-free reflow profile

Frequency Response (5Vp-p @ 0.1 meters)



RoHS Compliant





SMT-1324-TW-5V-R

12.5x12.5mm

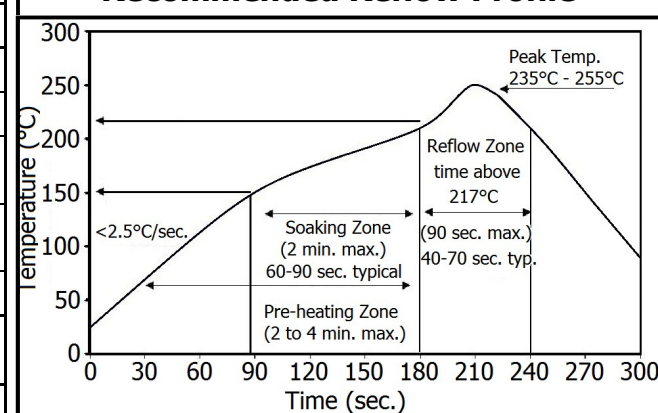
Transducer

Mechanical and Environment Testing

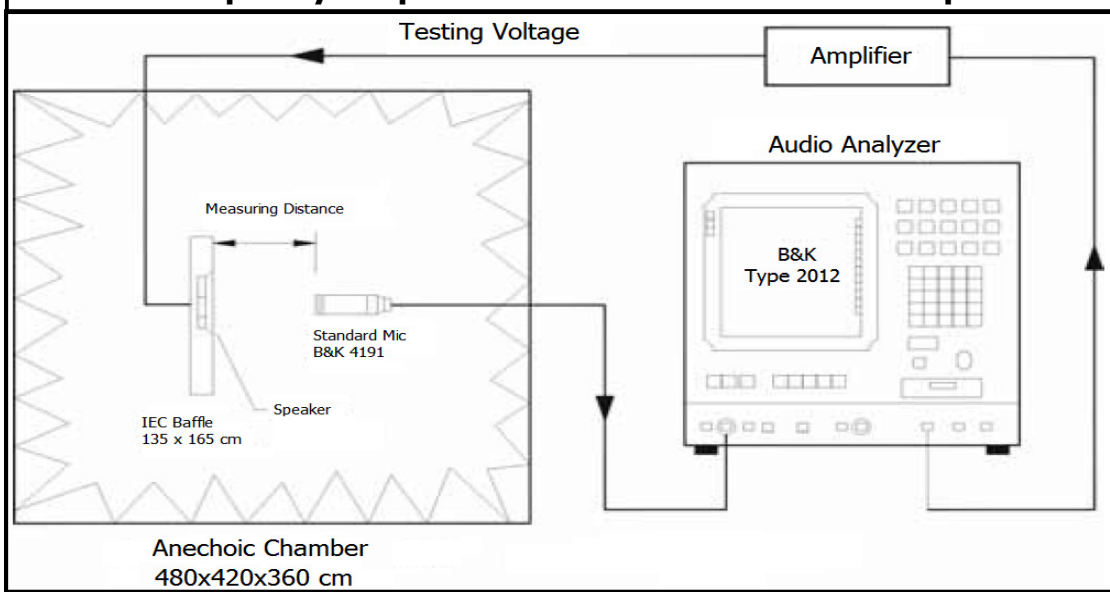
Test Description	Test Condition
High Temperature	85°C (±2°C) with random humidity for 96 hours
Low Temperature	-30°C (±2°C) with random humidity for 96 hours
Humidity	40°C (± 2°C) with 90% to 95% relative humidity for 96 hours
Vibration	0.75 mm movement modulated at 10-55 Hz in 3 directions for 6 hours total
Drop Test	100 cm free fall in six directions, 3 cycles
Temperature Cycle Test	-30°C to 80°C, five 90 minute cycles

After testing, part shall rest for 2 hours and then be tested for a clean, pure tone.

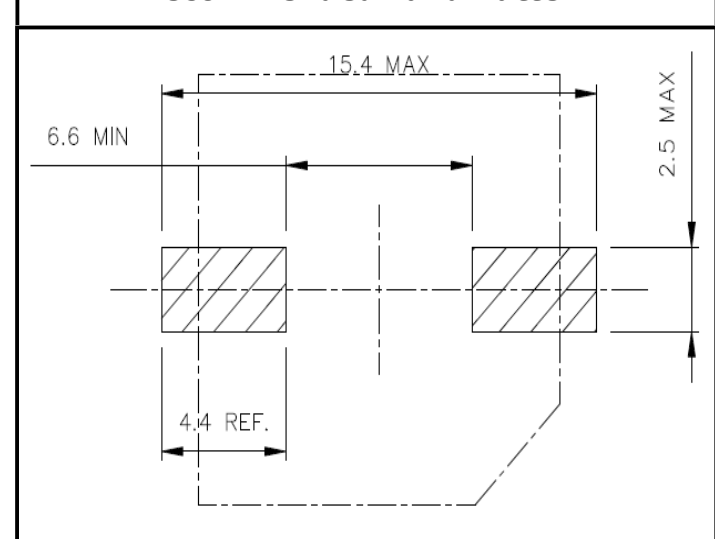
Recommended Reflow Profile



Frequency Response and SPL Measurement Setup



Recommended Land Pattern



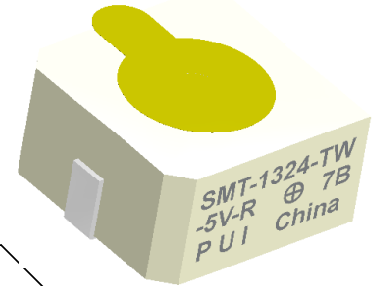
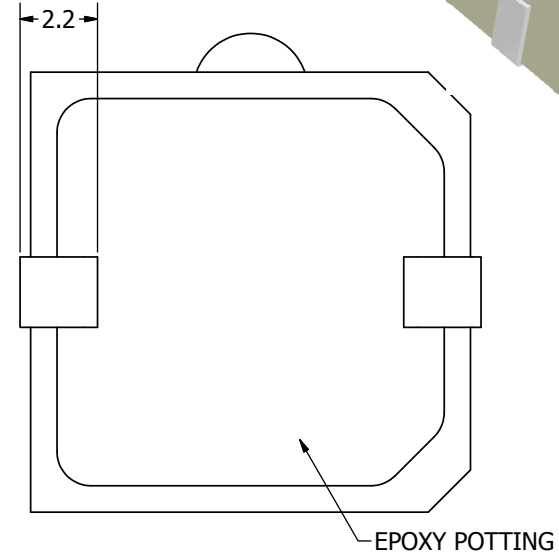
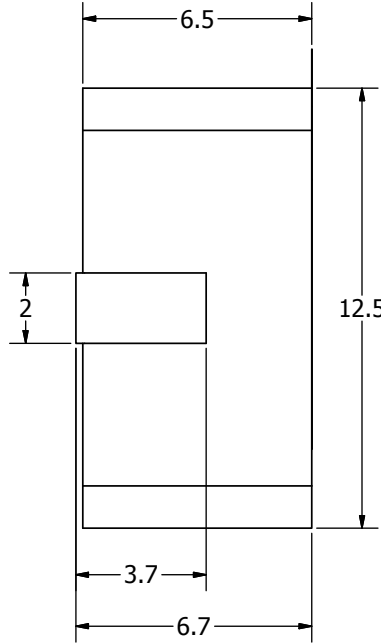
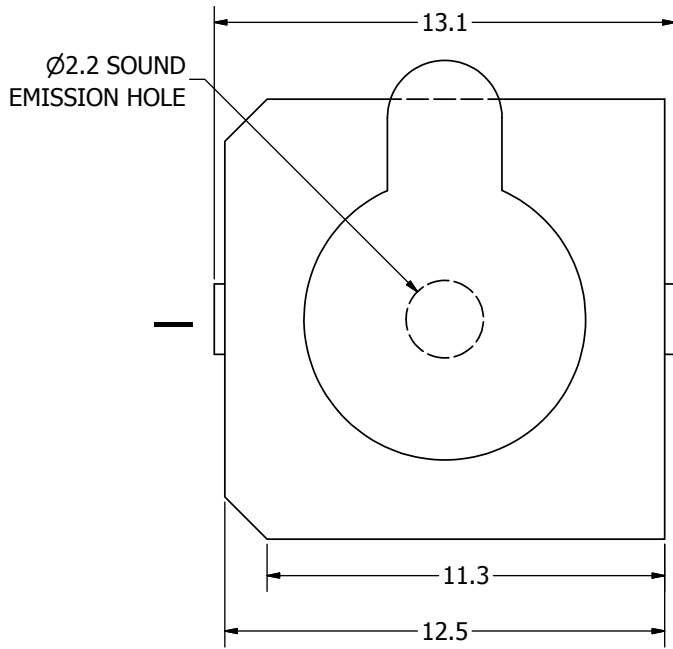
SPECIFICATIONS

PARAMETERS	VALUES	UNIT
RATED VOLTAGE (SQUARE WAVE)	5	Vp-p
OPERATING VOLTAGE RANGE	4 ~ 8	Vp-p
RATED CURRENT (MAX)	40	mA
COIL RESISTANCE	47 ± 5	OHM
MINIMUM SPL @ 10 CM	85	dB
RESONANT FREQUENCY	2,400 ± 500	Hz
OPERATING TEMPERATURE	-20 ~ +85	°C
STORAGE TEMPERATURE	-30 ~ +80	°C
HOUSING MATERIAL	NORYL	-
TERMINAL MATERIAL	Sn PLATED BRASS	-
WEIGHT	5	grams

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REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	1/16/2006	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	11/7/2007	B.R.



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.
3. THIS PART IS RoHS 2002/95/EC COMPLIANT.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS, TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°.	SIZE A3	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
		J.A.F.	1/16/2006	E.P.	1/17/2006	B.R.	1/17/2006	11/7/2007
SMT-1324-TW-5V-R.idw		 SMT-1324-TW-5V-R Transducer (Electro-Mech)				Edition	Sheet	
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