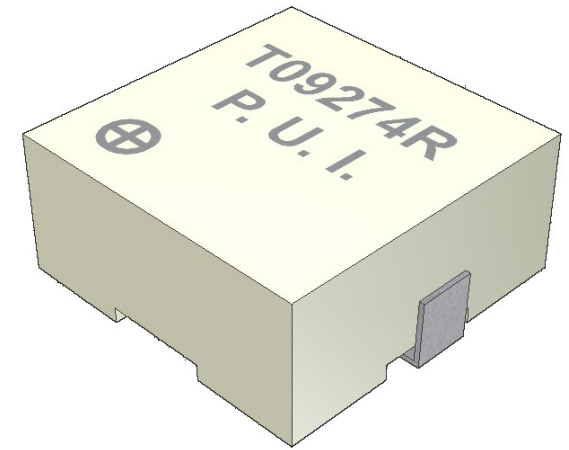




**pui  
audio**™ inc  
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## SMT-0927-S-4-R 9 x 9mm Transducer

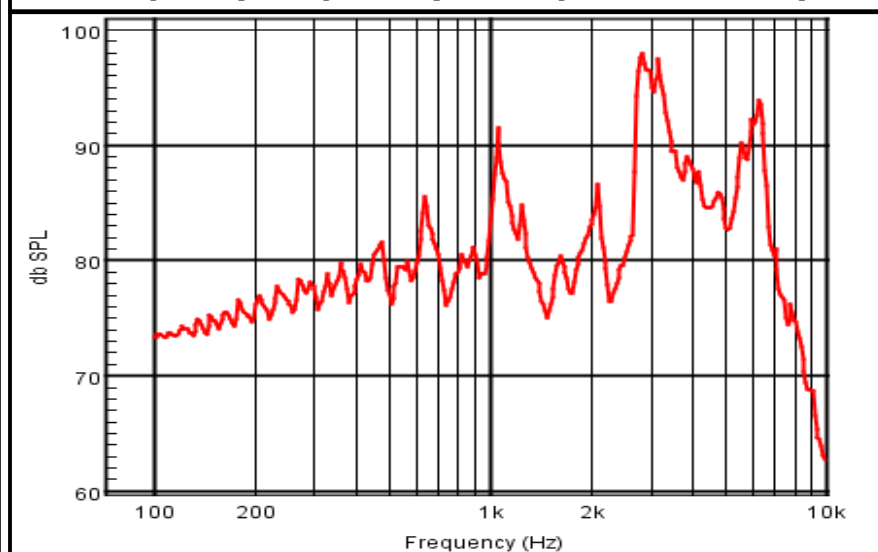


3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

- Side-firing electromechanical transducer designed for 2 to 4 V<sub>0</sub>-p
- Small 9 x 9mm footprint and 4mm height for thin, modern devices
- 85 dBA minimum output (3.6V<sub>0</sub>-p @ 10 cm) and 2,730 Hz resonant frequency
- Designed for reflow soldering using a lead-free profile

Frequency Response (3.6 V<sub>0</sub>-p @ 0.1 meters)



RoHS Compliant





# SMT-0927-S-4-R

## 9 x 9mm

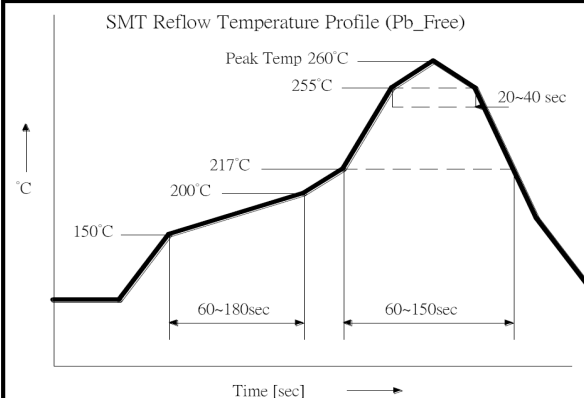
### Transducer

#### Mechanical and Environment Testing

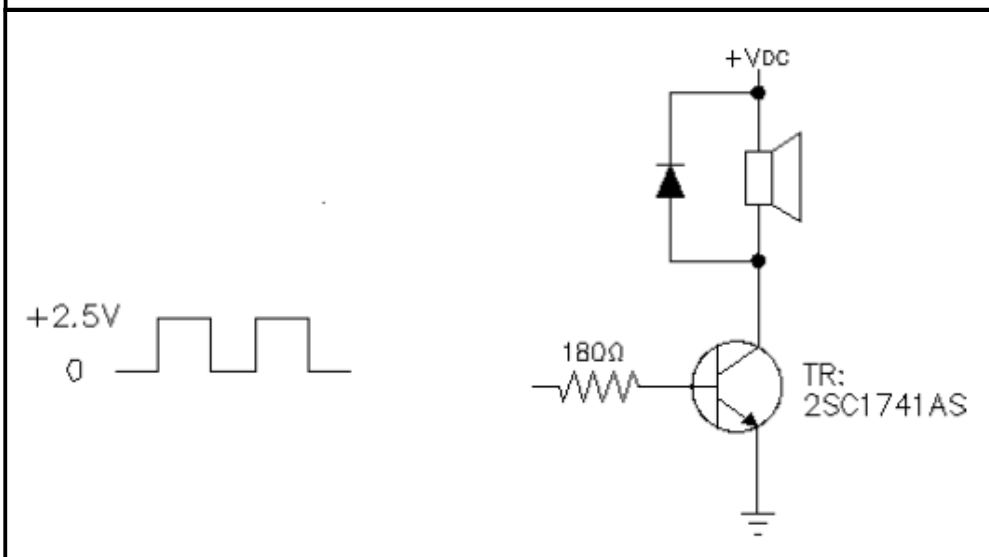
Test Description	Test Condition
High Temperature	80°C (±2°C) with random humidity for 96 hours
Low Temperature	-40°C (±2°C) with random humidity for 96 hours
Humidity	25°C to 85°C with 80% to 98% relative humidity for 12 hours, 10 cycles
Vibration	1.53 mm movement modulated at 10-55 Hz in 3 directions for 2 hours
Drop Test	75 cm free fall in three directions, 3 cycles each
Temperature Cycle Test	-40°C to 85°C, ten 60 minute cycles

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

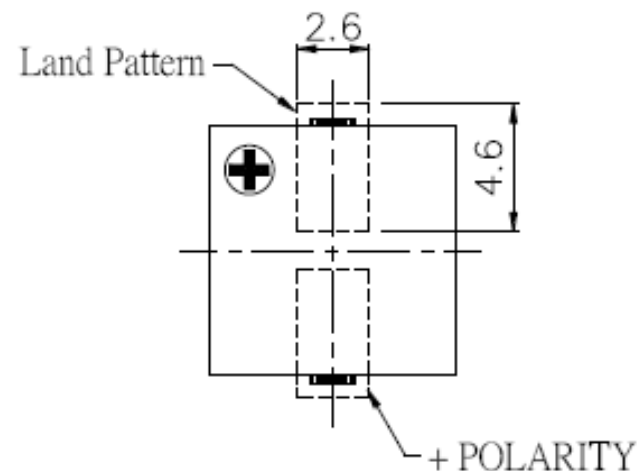
#### Recommended Reflow Profile



#### Recommended Drive Circuit



#### Recommended Land Pattern



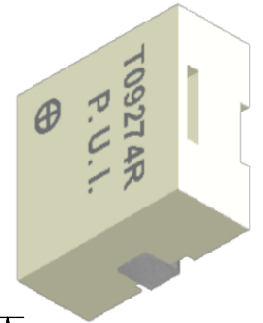
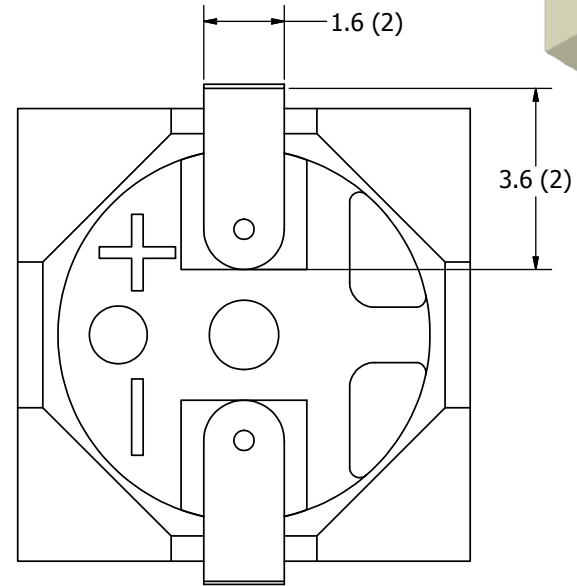
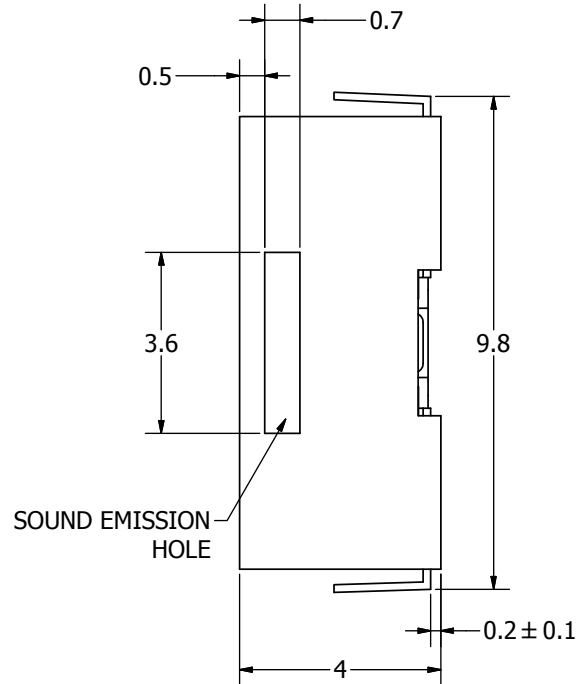
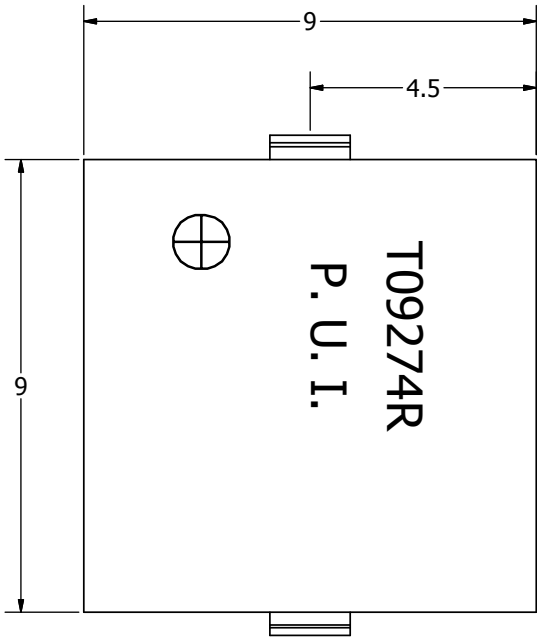
# SPECIFICATIONS

PARAMETERS	VALUES	UNIT
RATED VOLTAGE (SQUARE WAVE)	3.6	Vp-p
OPERATING VOLTAGE RANGE	2 ~ 4	Vp-p
RATED CURRENT (MAX)	100	mA
COIL RESISTANCE	16 ± 2.4	OHM
MINIMUM SPL @ 10 CM	85	dBA
RESONANT FREQUENCY	2,730 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	PA46	-
TERMINAL MATERIAL	Sn PLATED BRASS	-
WEIGHT	0.8	grams

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# REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	2/15/2006	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	11/2/2007	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	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date	
	A3	J.A.F.	2/16/2006	E.P.	2/16/2006	B.R.	2/16/2006	11/2/2007	
	SMT-0927-S-4-R.idw	 <b>pui audio</b> <small>a projects unlimited company</small>			<b>SMT-0927-S-4-R</b>		Transducer (Electro-Mech)		Edition -