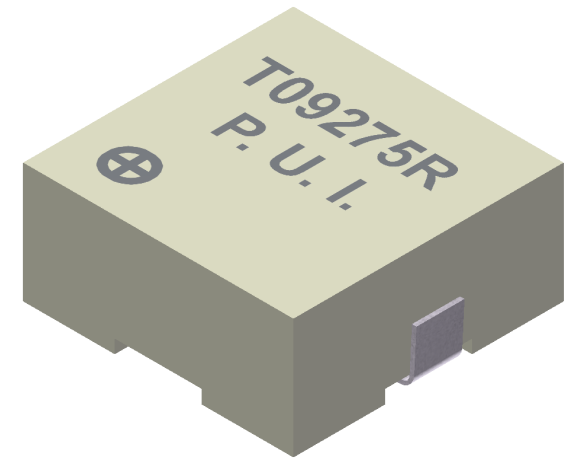




**pui  
audio**™ inc  
a projects unlimited company

## SMT-0927-S-5-R 9 x 9mm Transducer

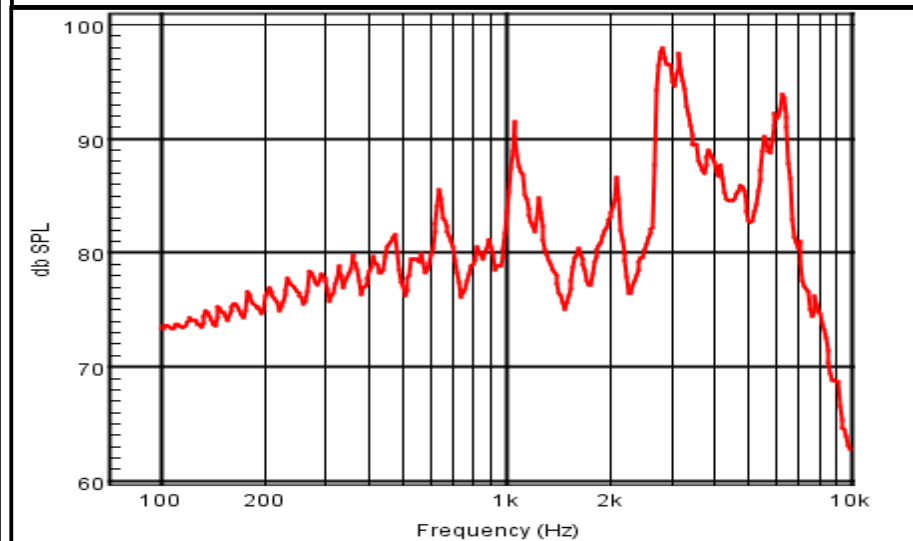


3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

- Side-firing electromechanical transducer designed for 3 to 7 V<sub>0-p</sub>
- Small 9 x 9mm footprint and 4mm height for thin, modern devices
- 85 dBA minimum output (5V<sub>0-p</sub> @ 10 cm) and 2,730 Hz resonant frequency
- Designed for reflow soldering using a lead-free profile

### Frequency Response (5 V<sub>0-p</sub> @ 0.1 meters)



RoHS Compliant





# SMT-0927-S-5-R

## 9 x 9mm

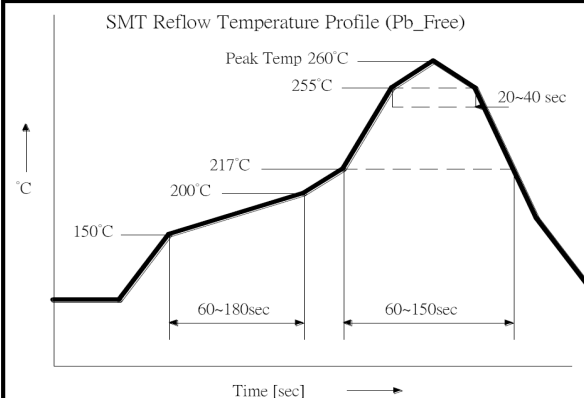
### Transducer

#### Mechanical and Environment Testing

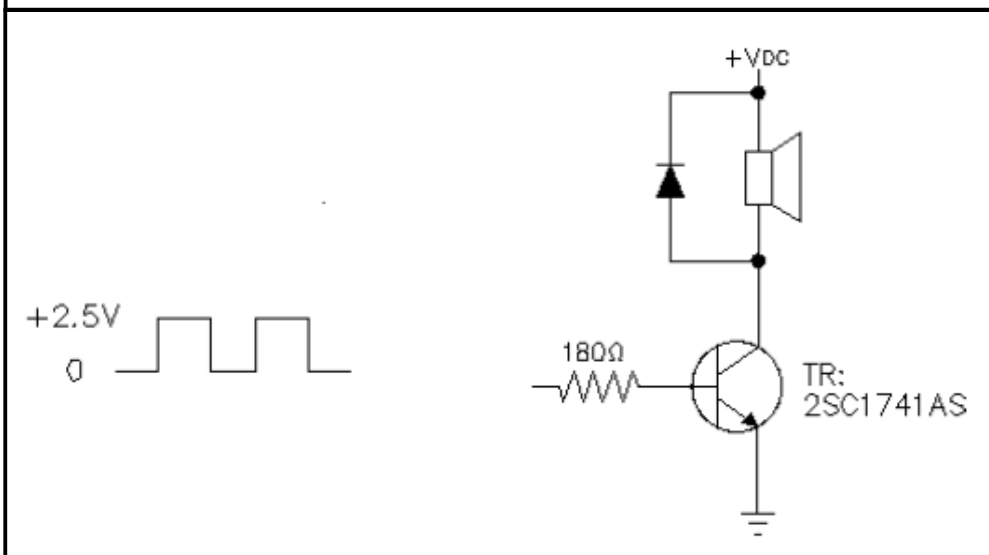
Test Description	Test Condition
High Temperature	80°C (±2°C) with random humidity for 96 hours
Low Temperature	-40°C (±2°C) with random humidity for 96 hours
Humidity	25°C to 85°C with 80% to 98% relative humidity for 12 hours, 10 cycles
Vibration	1.53 mm movement modulated at 10-55 Hz in 3 directions 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.

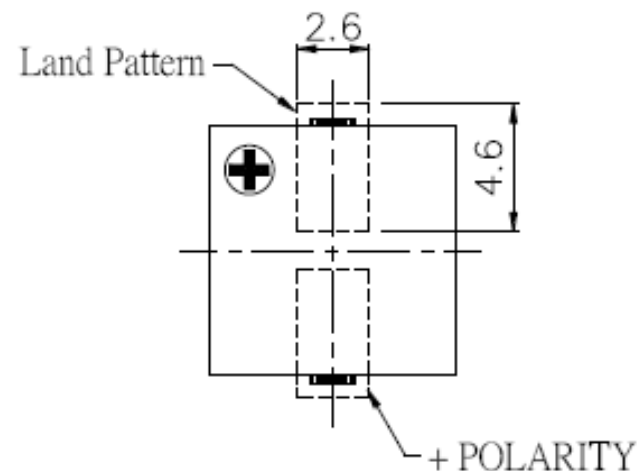
#### Recommended Reflow Profile



#### Recommended Drive Circuit



#### Recommended Land Pattern



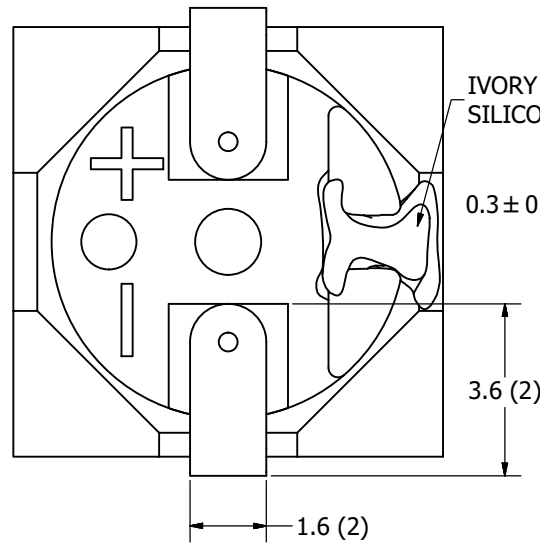
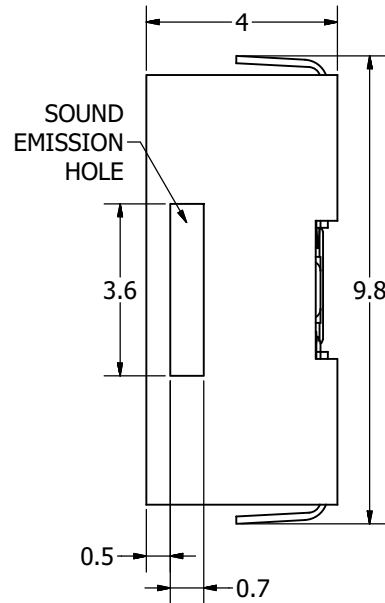
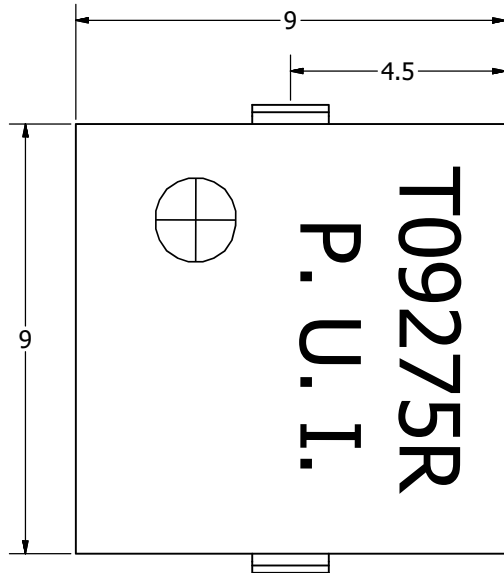
# SPECIFICATIONS

PARAMETERS	VALUES	UNIT
RATED VOLTAGE	5	V0-p
OPERATING VOLTAGE RANGE	3 ~ 7	V0-p
RATED CURRENT (MAX)	80	mA
COIL RESISTANCE	32 ± 4.8	OHM
MINIMUM SPL @ 10 CM	85	dB
RESONANT FREQUENCY	2,730 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	PA46	-
TERMINAL MATERIAL	Sn PLATED PHOSPHOR BRONZE	-
WEIGHT	0.8	grams

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# REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	9/16/2005	
A	REVISED SILICONE POSITION	6/2/2010	B.R.
B	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	6/2/2010	B.R.
C	REVISED VOLTAGE SPECIFICATIONS TO V0-P	10/27/16	M.V.



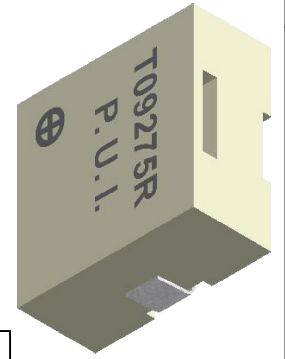
IVORY SILICONE

0.3 ± 0.1

3.6 (2)

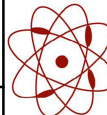
1.6 (2)

0.2



### 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 <b>A3</b>	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
		J.A.F.	9/16/2005	E.P.	9/16/2005	B.R.	9/16/2005	6/2/2010
SMT-0927-S-5-R.idw		 <b>pui audio</b> a projects unlimited company				<b>SMT-0927-S-5-R</b> Transducer (Electro-Mech)		
						Edition	Sheet	
						-	1 / 1	