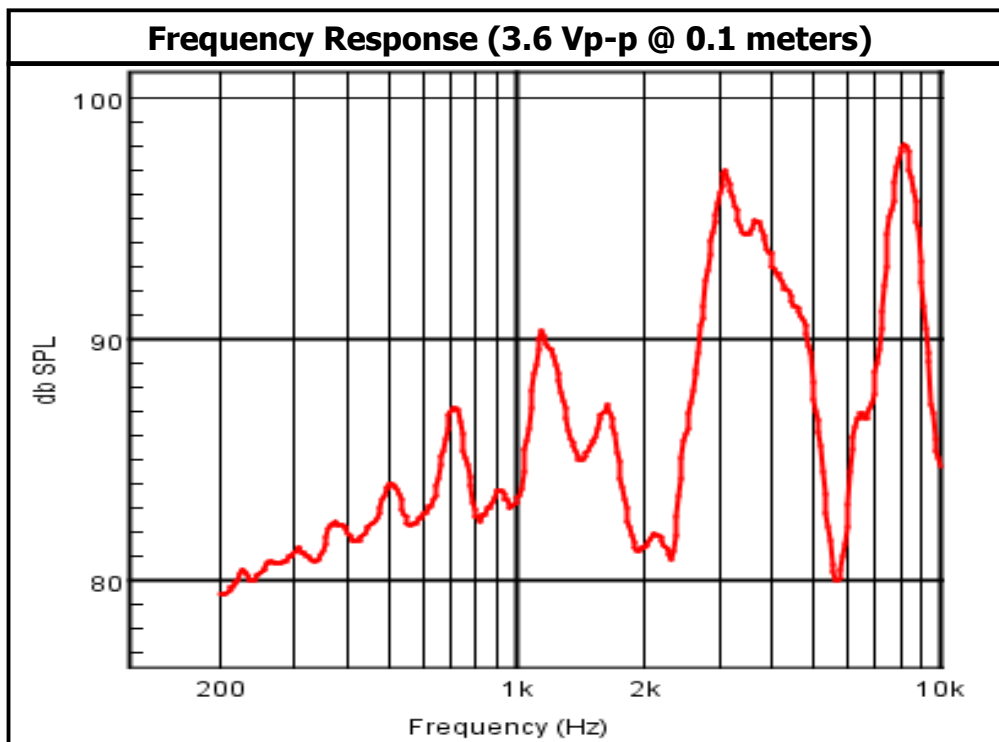
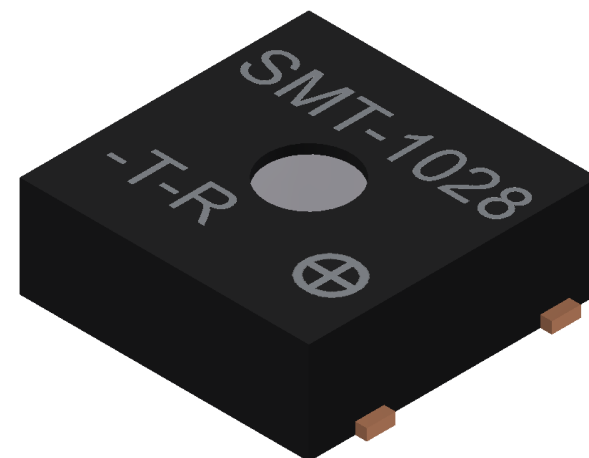


## SMT-1028-T-R 10 x 10mm Transducer

3541 Stop Eight Road • Dayton, Ohio 45414

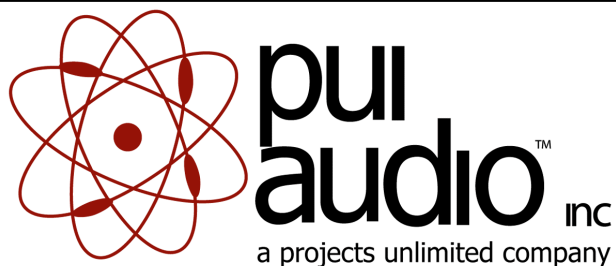
### Product Overview

- Top-firing electromechanical transducer designed for 3 to 4.6 Vp-p
- Small 10 x 10mm footprint with surprising 90 dB output
- 2,830 Hz resonant frequency targets most sensitive region of human hearing
- Designed for reflow soldering using a lead-free profile



RoHS Compliant





# SMT-1028-T-R

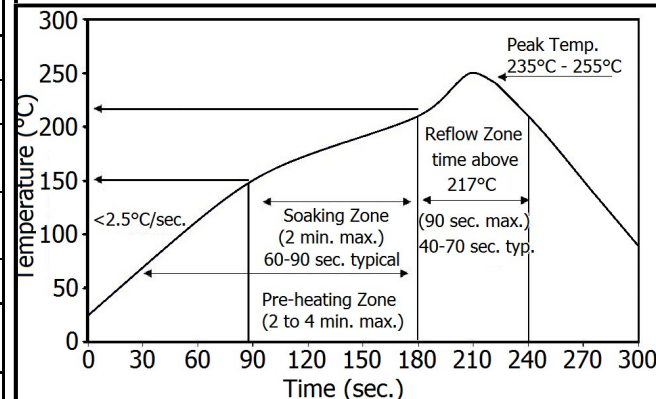
## 10 x 10mm

## Transducer

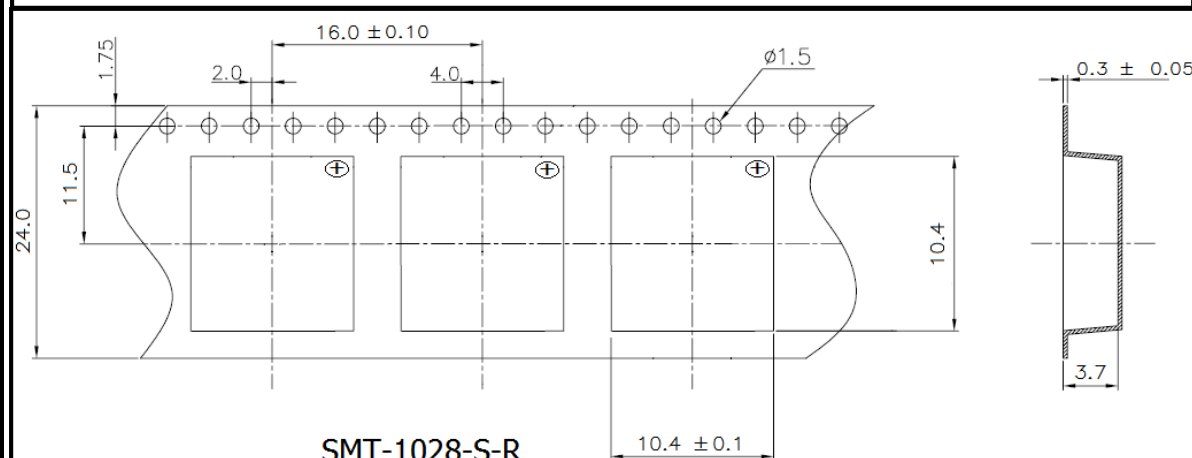
### Mechanical and Environment Testing

Test Description	Test Condition
High Temperature	85°C ( $\pm 2^\circ\text{C}$ ) with random humidity for 96 hours
Low Temperature	-40°C ( $\pm 2^\circ\text{C}$ ) with random humidity for 96 hours
Humidity	25°C to 60°C with 90% to 95% relative humidity for 12 hours, 10 cycles
Vibration	1.53 mm movement modulated at 10-55 Hz in 3 directions for 6 hours
Drop Test	120 cm free fall in six directions, 3 cycles
Temperature Cycle Test	-30°C to 70°C, five 90 minute cycles

### Recommended Reflow Profile

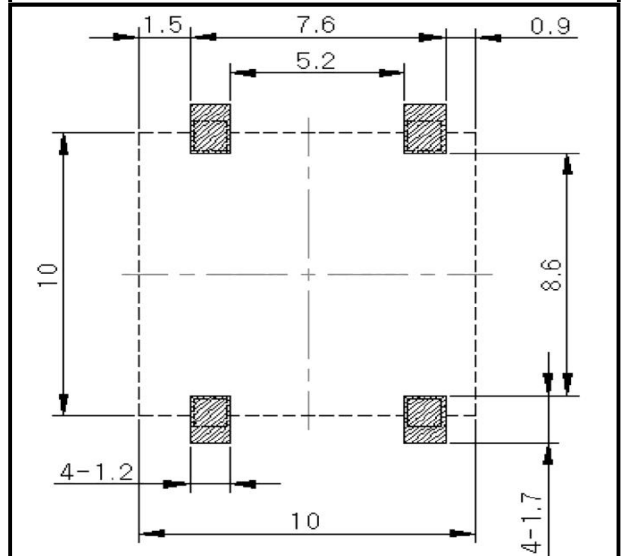


### Tape Dimensions



SMT-1028-S-R  
Tape Dimensions  
1,000 PCS/Reel

### Recommended Land Pattern



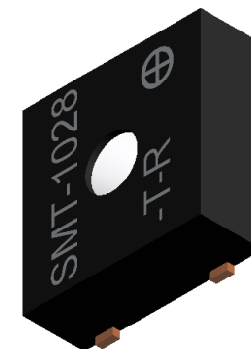
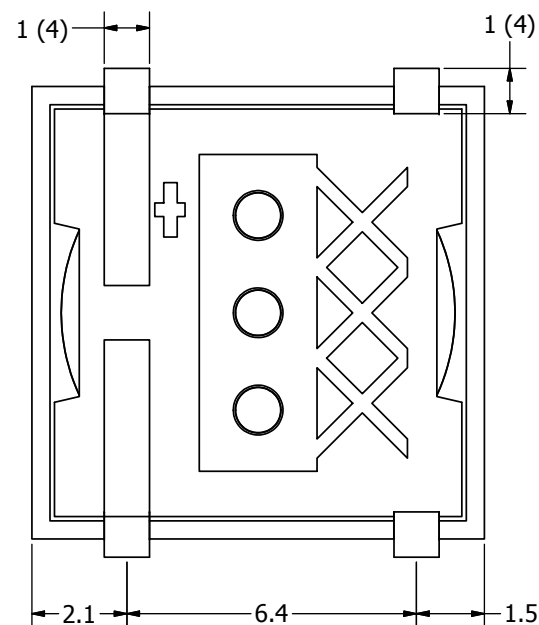
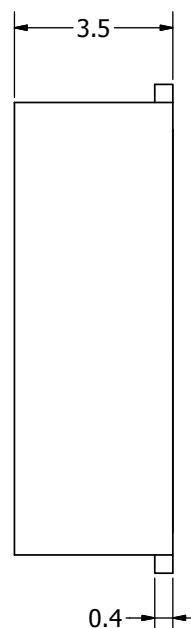
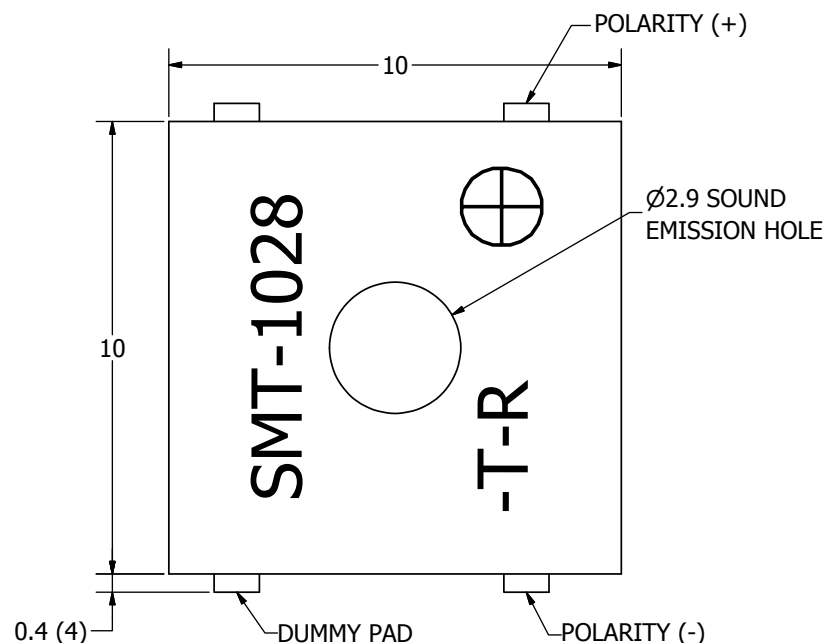
## SPECIFICATIONS

PARAMETERS	VALUES	UNIT
RATED VOLTAGE (SQUARE WAVE)	3.6	Vp-p
OPERATING VOLTAGE RANGE	3 ~ 4.6	Vp-p
RATED CURRENT (MAX)	100	mA
COIL RESISTANCE	18 ± 5	OHM
MINIMUM SPL @ 10 CM	90	dBA
RESONANT FREQUENCY	2,830 ± 500	Hz
OPERATING TEMPERATURE	-20 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	PA46	-
TERMINAL MATERIAL	Au PLATED COPPER	-
WEIGHT	1	grams

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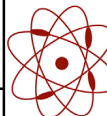
## REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	8/30/2005	
A	REVISED TERMINAL MATERIAL	1/20/2006	B.R.
B	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	11/6/2007	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 13°.	SIZE  A3	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date			
		J.A.F.	8/30/2005	B.R.	8/30/2005	E.P.	8/30/2005	11/7/2007			
	SMT-1028-T-R.idw		 <b>pui audio</b> <sup>TM</sup> <small>a projects unlimited company</small>			SMT-1028-T-R			Edition -		Sheet 1 / 1
					Transducer (Electro-Mech)						