

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

# SMT-0825-S-4-R

## 8.5x8.5mm

### Transducer

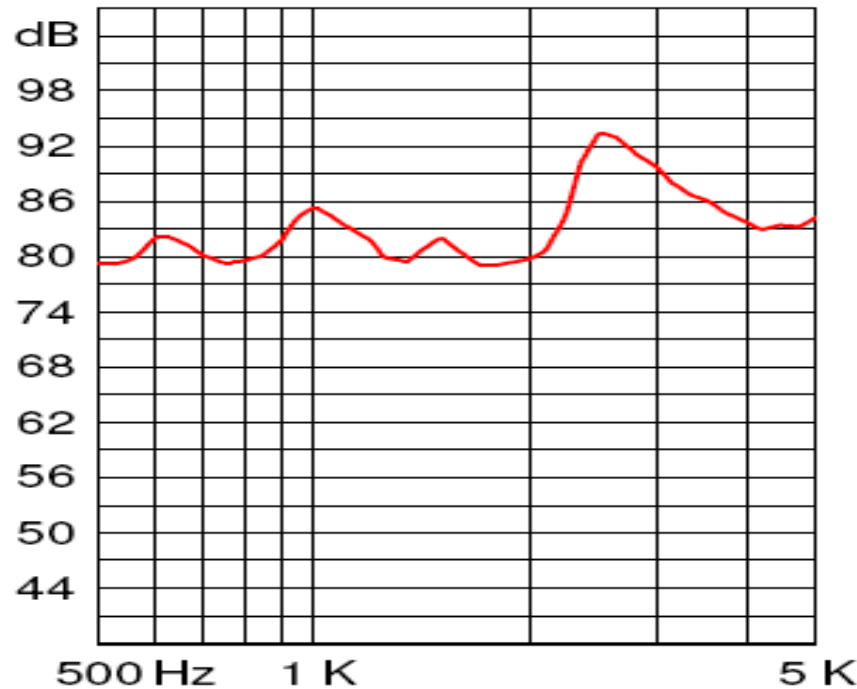


3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

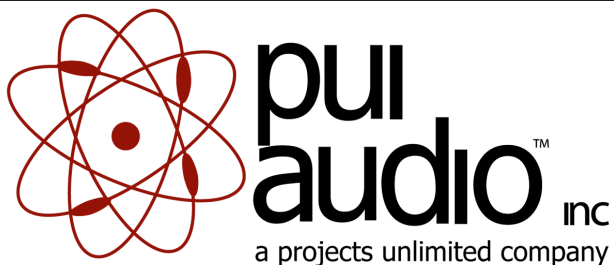
- Side-firing electromechanical transducer designed for 2.5 to 4.5 Vp-p
- Small 8.5 x 8.5mm footprint and 3mm height for thin, modern devices
- 85 dBA minimum output (3.6Vp-p @ 10 cm) and 2.5kHz resonant frequency
- Designed for reflow soldering using a lead-free profile

**Frequency Response (3.6 Vp-p @ 0.1 meters)**



RoHS Compliant





# SMT-0825-S-4-R

## 8.5x8.5mm

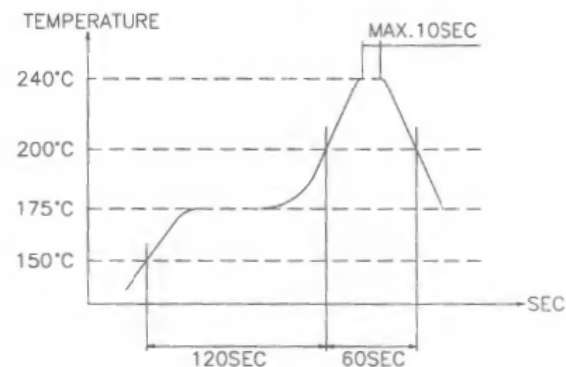
### Transducer

#### Mechanical and Environment Testing

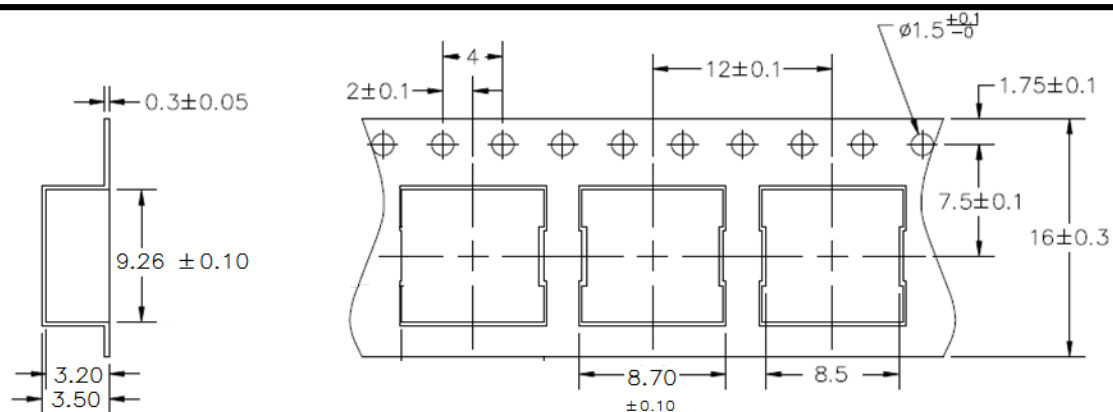
Test Description	Test Condition
High Temperature	85°C (±2°C) with random humidity for 96 hours
Low Temperature	-40°C (±2°C) with random humidity for 96 hours
Humidity	25°C to 60°C with 90% to 95% relative humidity for 12 hours, 10 cycles
Vibration	1.53 mm movement modulated at 10-55 Hz in 3 directions 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

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

#### Recommended Reflow Profile

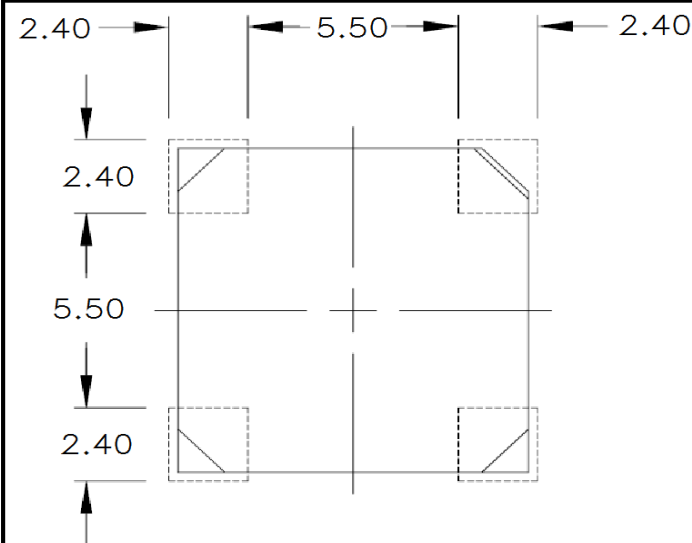


#### Tape Dimensions



SMT-0825-S-4-R  
Tape Dimensions  
2,000 PCS/Reel

#### Recommended Land Pattern



# SPECIFICATIONS

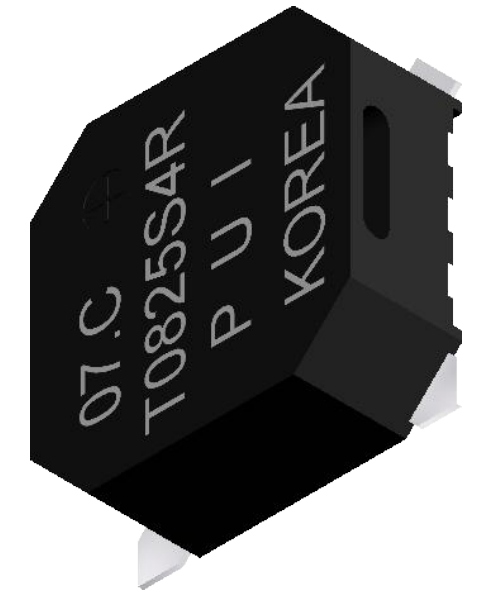
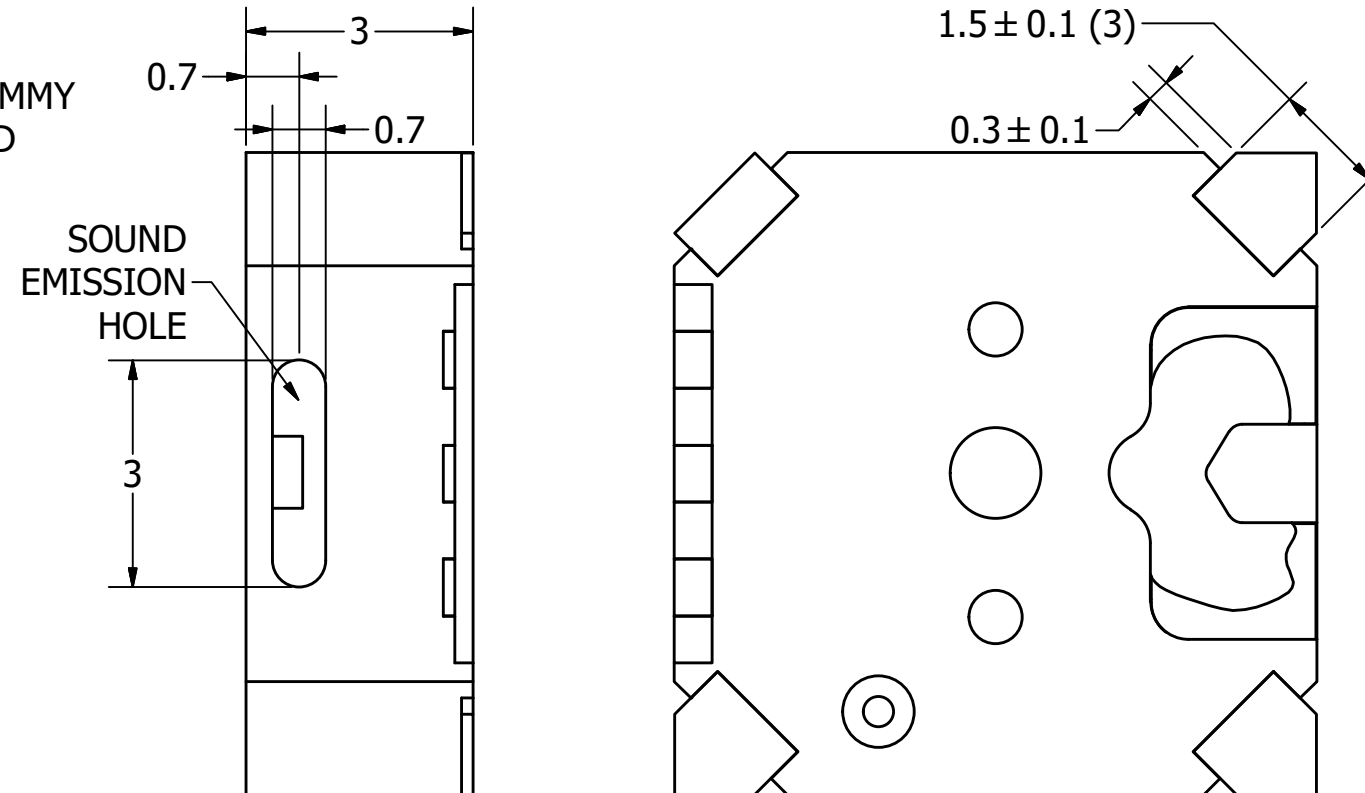
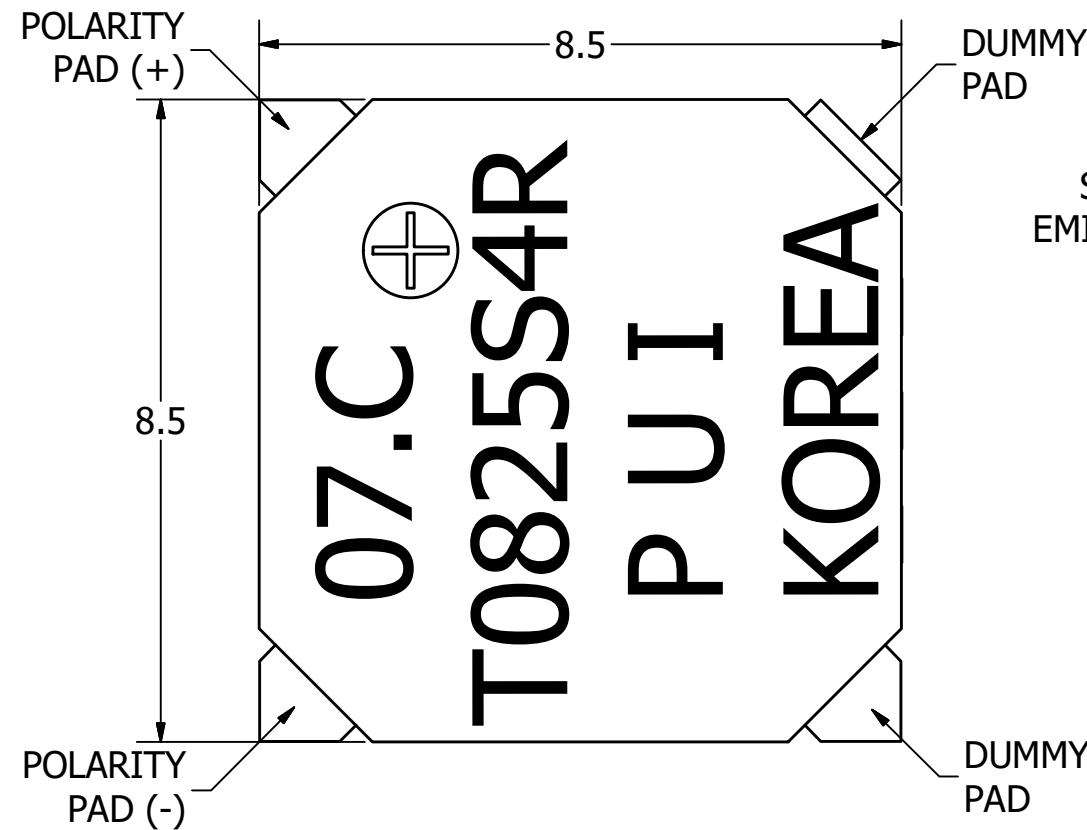
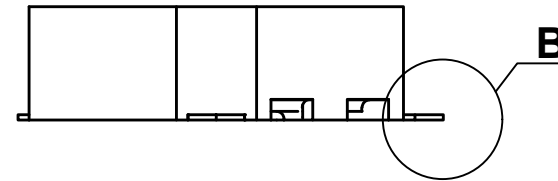
PARAMETERS	VALUES	UNIT
RATED VOLTAGE	3.6	Vp-p
OPERATING VOLTAGE RANGE	2.5 ~ 4.5	Vp-p
RATED CURRENT (MAX)	90	mA
COIL RESISTANCE	15 ± 3	OHM
MINIMUM SPL @ 10 CM	85	dB
RESONANT FREQUENCY	2,500 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	LCP	-
TERMINAL MATERIAL	Sn PLATED PHOSPHOR BRONZE	-
WEIGHT	0.4	grams

THIS DOCUMENT CONTAINS DATA PROPRIETARY TO PROJECTS UNLIMITED, INC. ANY USE OR REPRODUCTION, IN ANY FORM, WITHOUT PRIOR WRITTEN PERMISSION OF PROJECTS UNLIMITED, INC. IS PROHIBITED.  
©2003, Projects Unlimited Inc.

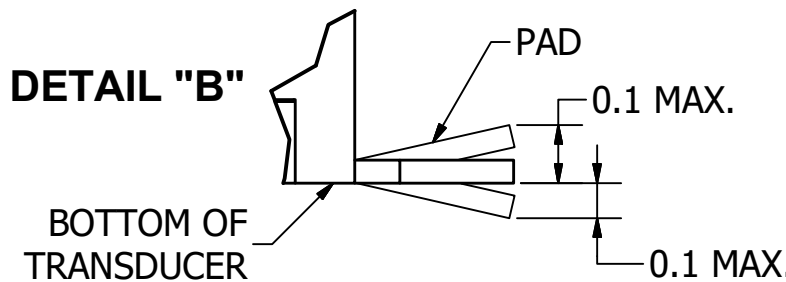
# REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	4/1/2005	
A	ADDED RoHS COMPLIANCE NOTE	8/10/2005	
B	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	4/30/2010	B.R.
C	ADDED REFLOW NOTE	1/25/2019	M.L.

**A (5:1)**



**DETAIL "B"**



**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWL WITHOUT NOTICE.
3. THIS PART IS RoHS 2011/65/EU COMPLIANT.
4. REFLOW ACCEPTABLE. MAX TEMP 260C, 10sec OR LESS.

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	
		G.V.	4/1/2005	E.P.	4/1/2005	R.W.	4/1/2005	4/30/2010	
SMT-0825-S-4-R.idw				<b>SMT-0825-S-4-R</b>					
Transducer (Electro-Mech)						Edition		Sheet	
						-		1 / 1	