

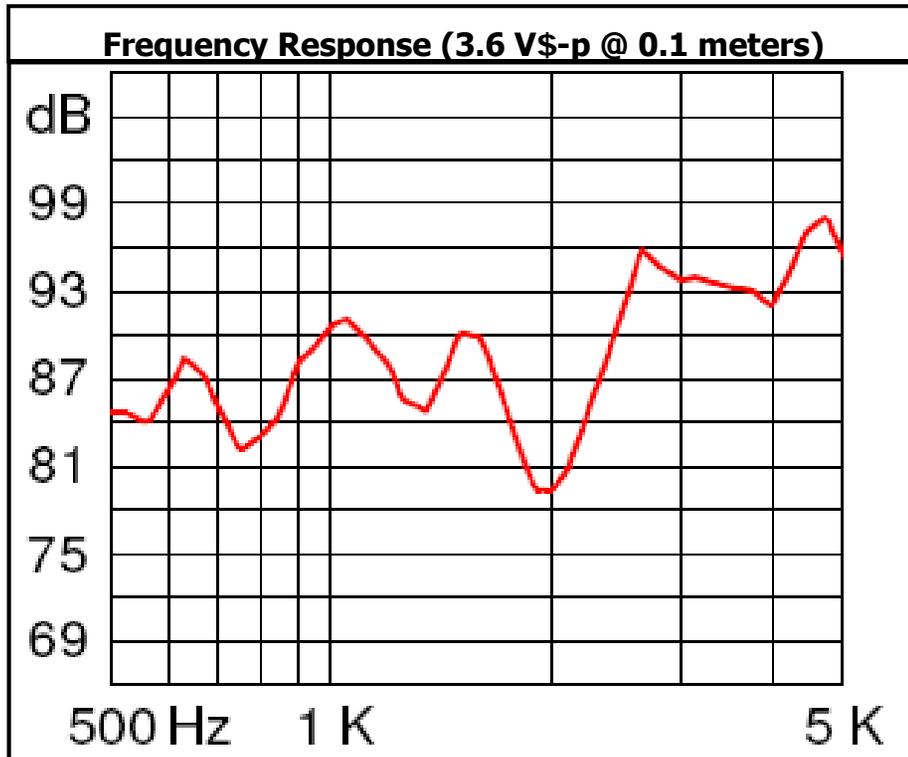
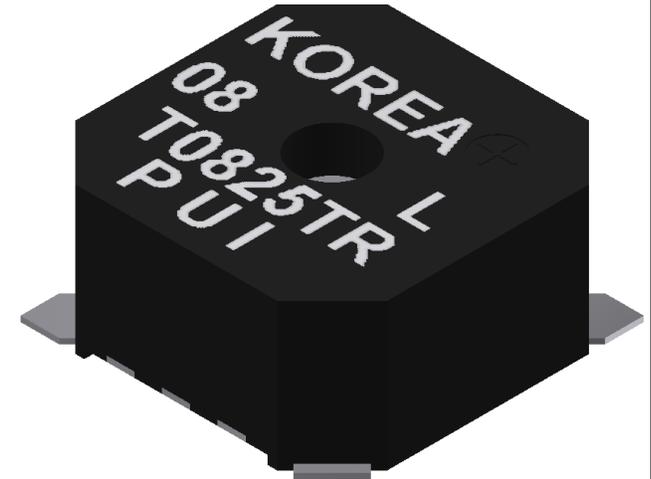
pui
audio™ inc
a projects unlimited company

SMT-0825-T-R 8.5x8.5mm Transducer

3541 Stop Eight Road • Dayton, Ohio 45414

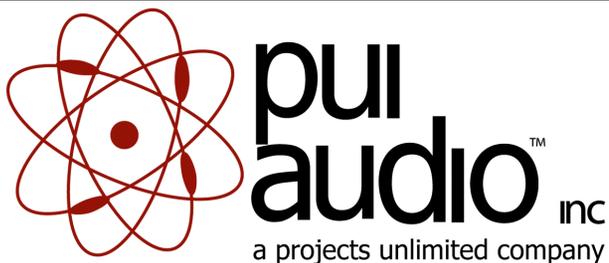
Product Overview

- Top-firing electromechanical transducer designed for 2.5 to 4.5 V
- Small 8.5 x 8.5mm footprint and 4mm height for thin, modern devices
- 87 dBA minimum output (3.6V @ 10 cm) and 2.5kHz resonant frequency
- Designed for reflow soldering using a lead-free profile



RoHS Compliant





SMT-0825-T-R

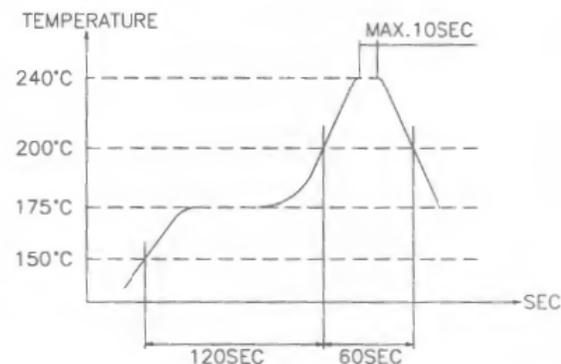
8.5x8.5mm

Transducer

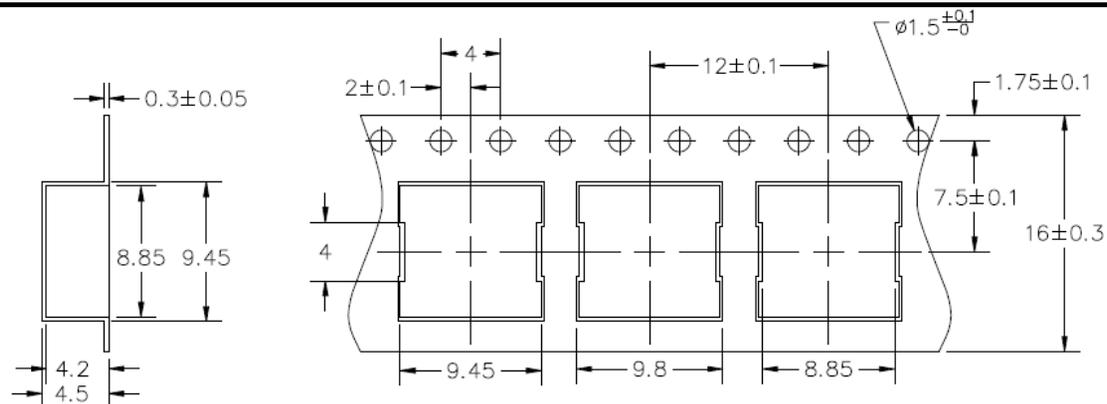
Mechanical and Environment Testing

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

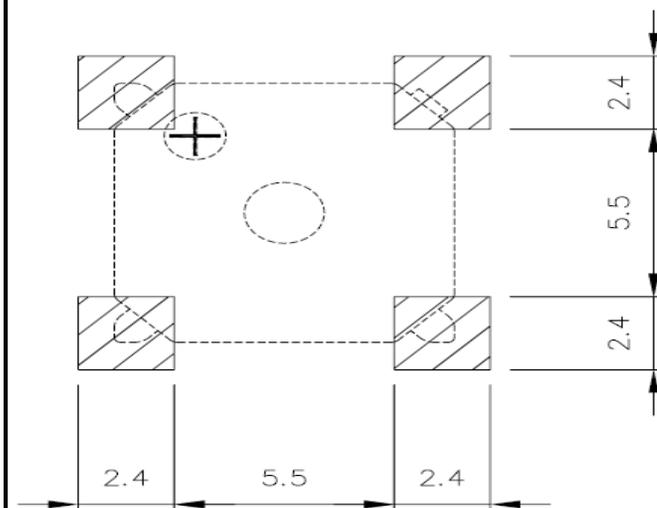


Tape Dimensions



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

Recommended Land Pattern



SPECIFICATIONS

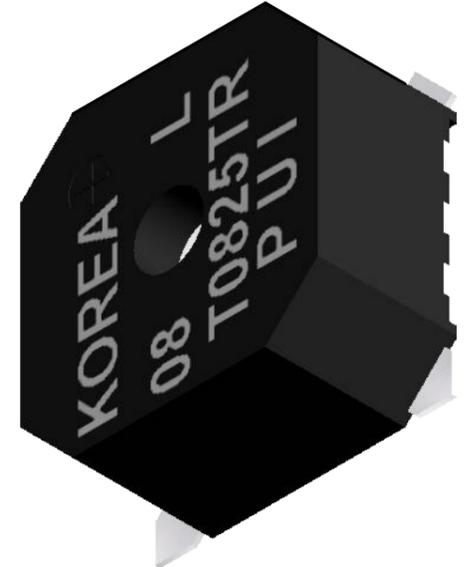
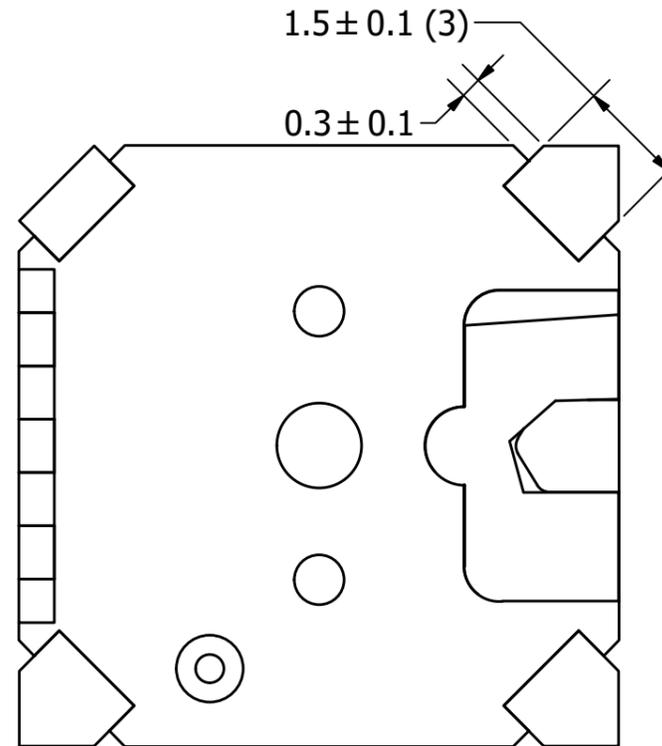
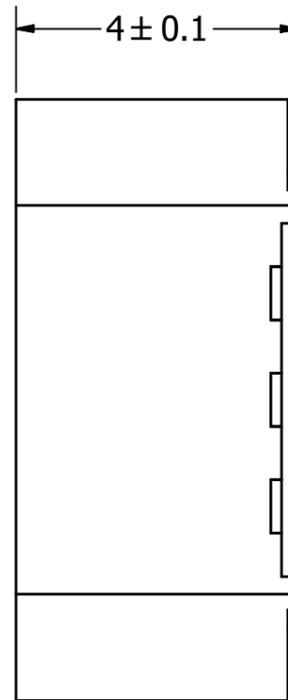
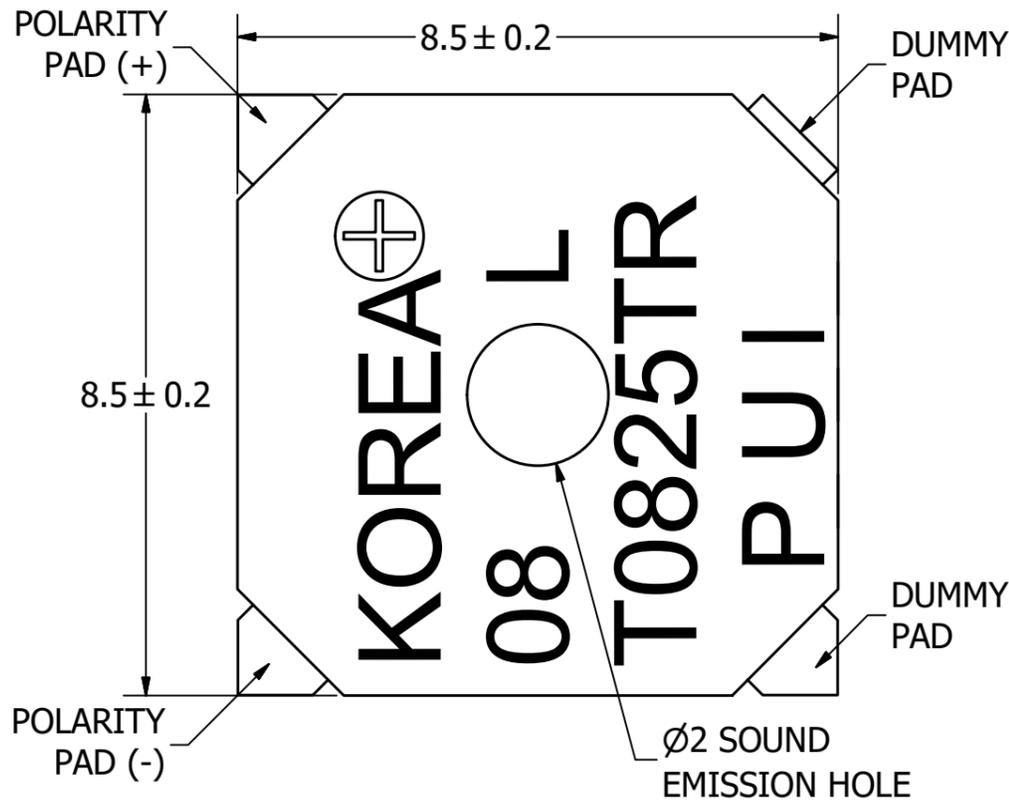
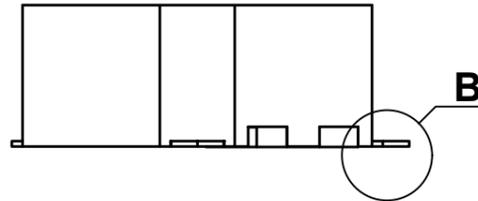
PARAMETERS	VALUES	UNITS
RATED VOLTAGE	3.6	V0-p
OPERATING VOLTAGE RANGE	2.5 ~ 4.5	V0-p
RATED CURRENT (MAX)	90	mA
COIL RESISTANCE	15 ± 3	OHM
MINIMUM SPL @ 10 CM	87	dBA
RESONANT FREQUENCY	2,500 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	LCP	-
TERMINAL MATERIAL	Sn PLATED PBS	-
WEIGHT	0.42	grams

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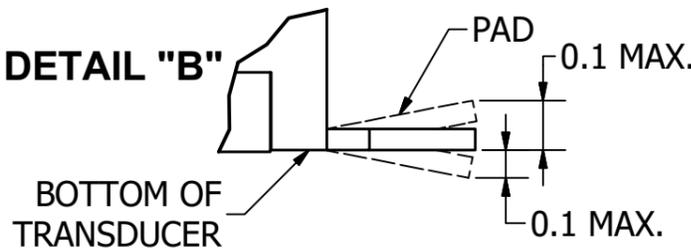
REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	1/4/2005	
A	CHANGED MATERIAL & TERMINAL MATERIAL	3/9/2005	G.V.
B	REMOVED LEAD FREE ADDED RoHS NOTE	8/10/2005	
C	ADDED RESONANT FREQ. TOLERANCE	5/16/2007	R.W.
D	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	5/3/2010	B.R.
E	REVISED VOLTAGE SPECIFICATIONS FROM Vp-p TO V0-p	8/31/2020	M.V.

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 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	
		R.A.C.	1/4/2005			R.W.	1/4/2005	5/3/2010	
SMT-0825-T-R.idw				SMT-0825-T-R Transducer (Electro-Mech)					
								Edition	Sheet
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