

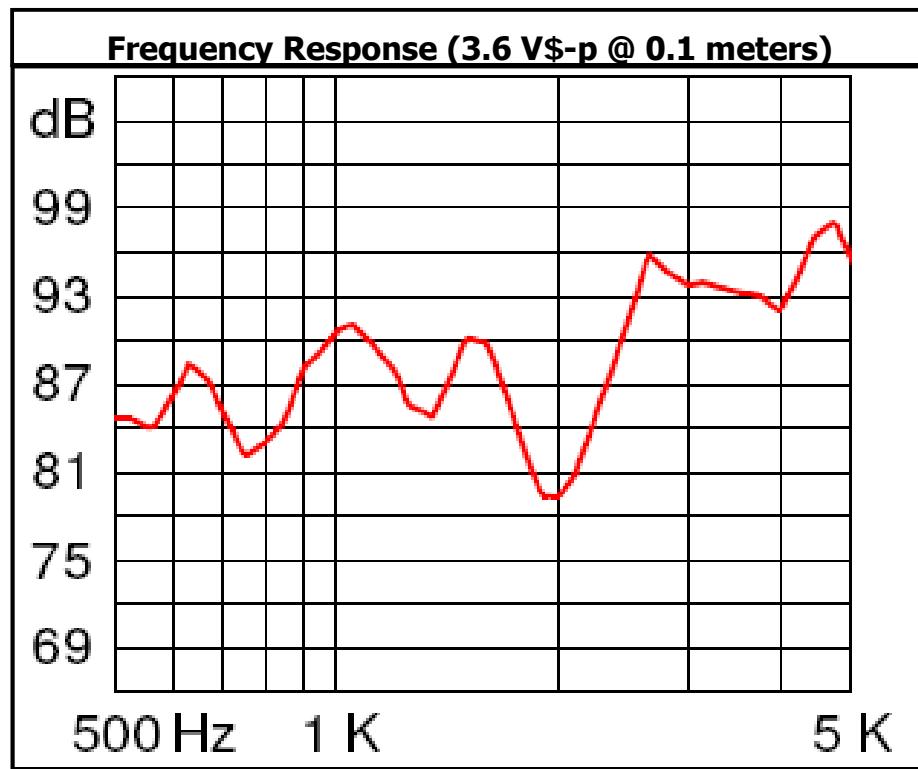
3541 Stop Eight Road • Dayton, Ohio 45414

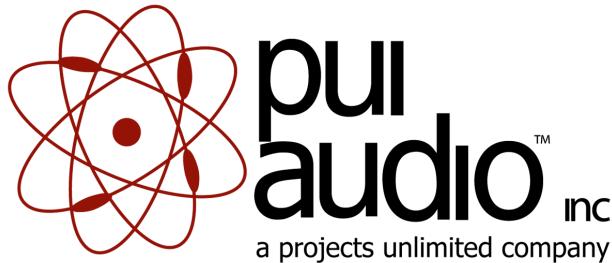
SMT-0825-T-R 8.5x8.5mm Transducer



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



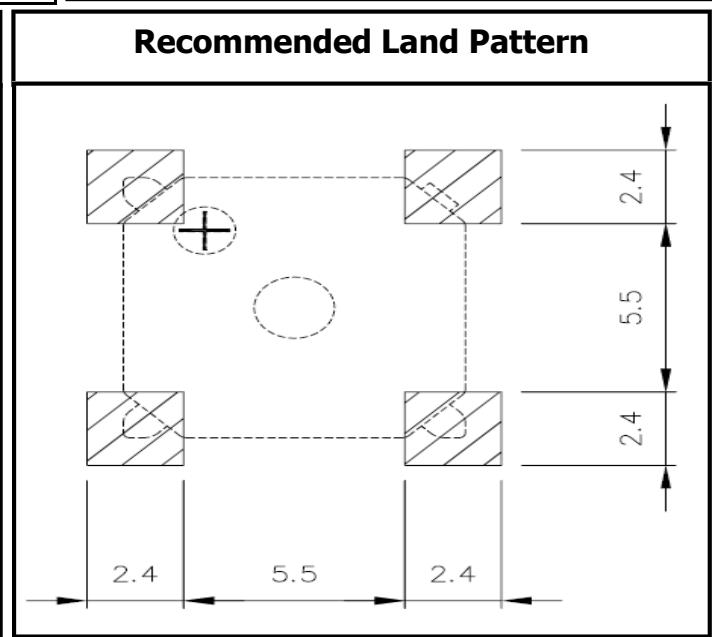
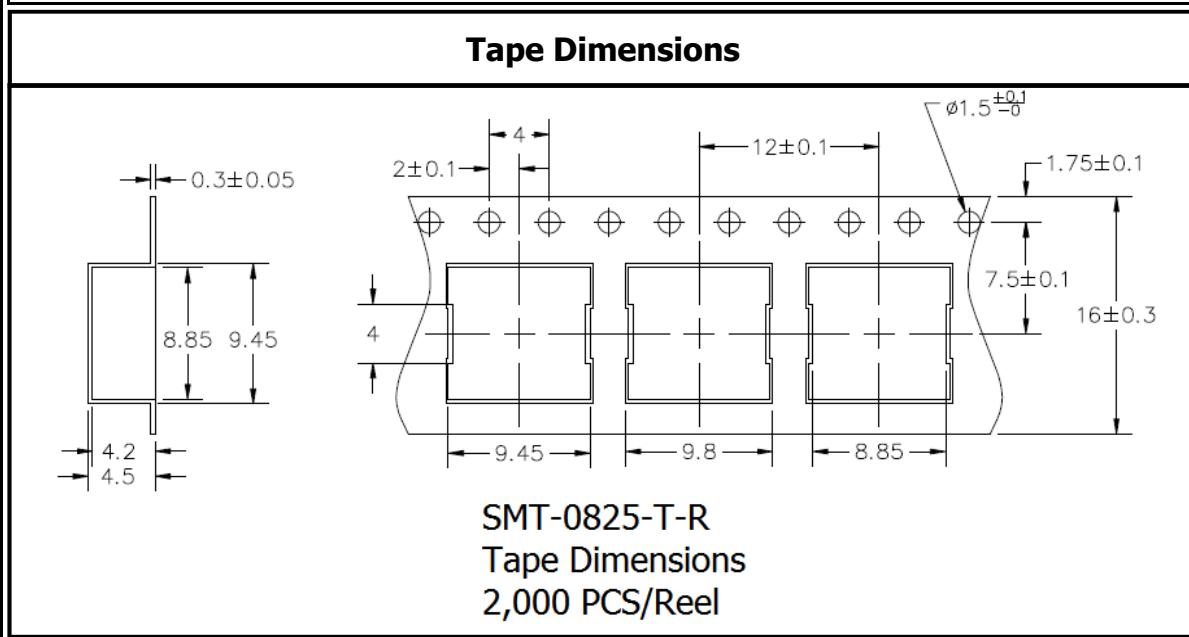
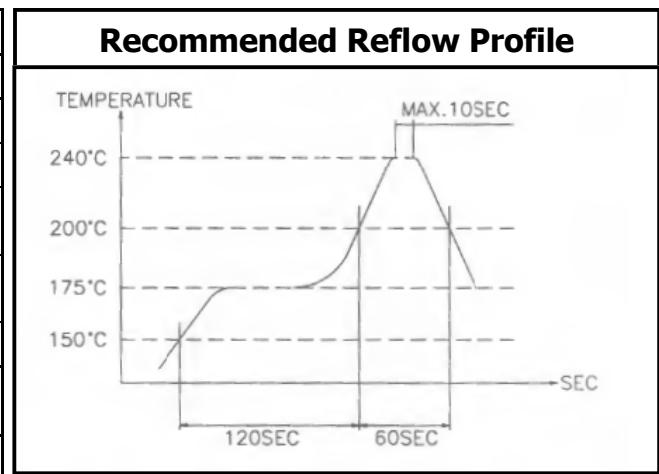


SMT-0825-T-R

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



SPECIFICATIONS

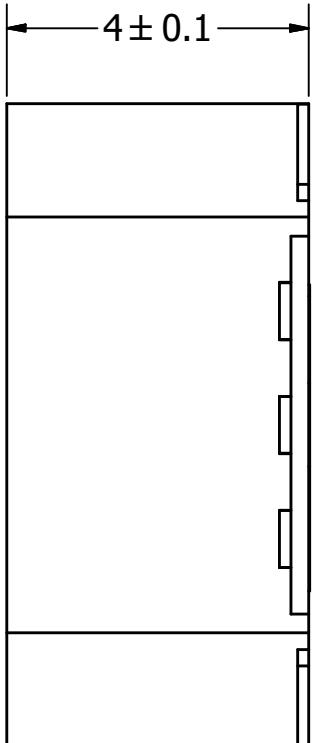
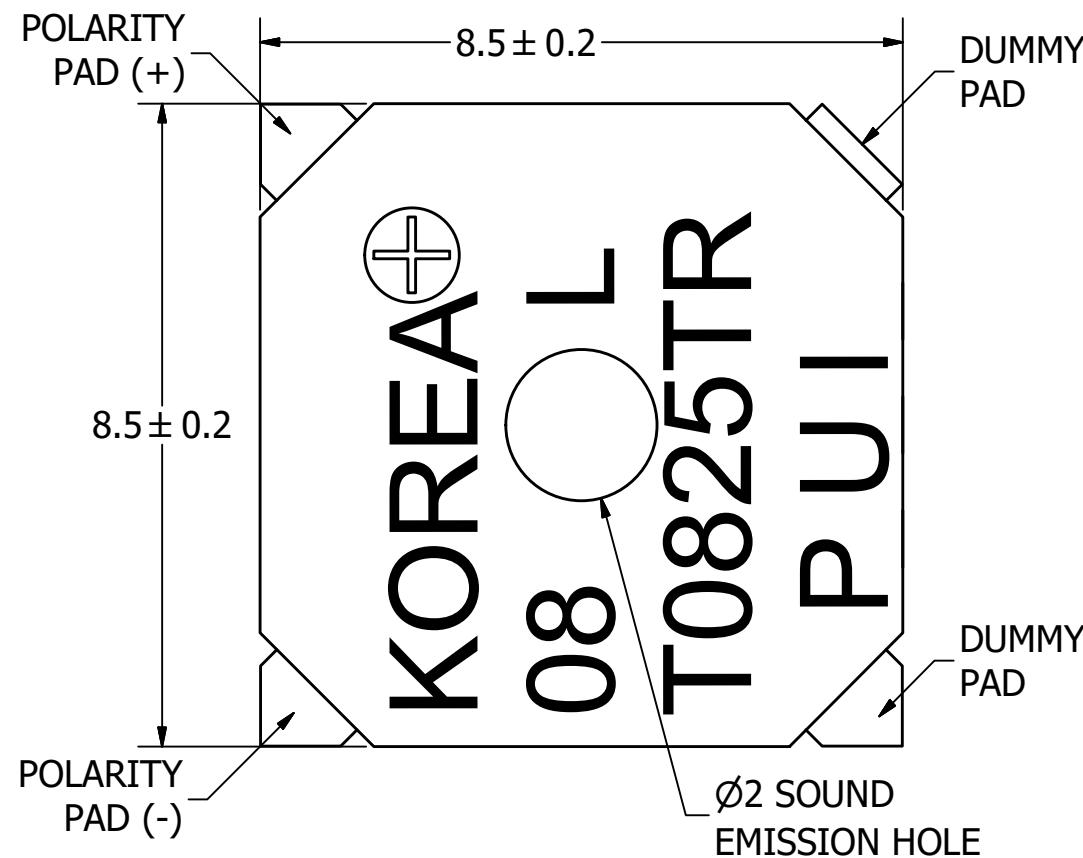
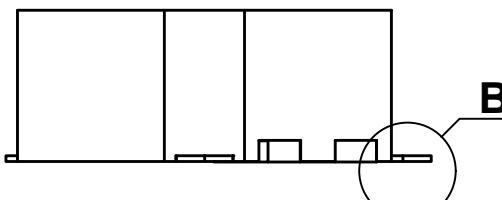
PARAMETERS	VALUES	UNITS
RATED VOLTAGE	3.6	V0-p
OPERATING VOLTAGE RANGE	2.5 ~ 4.5	V0-p
RATED CURRENT (MAX)	90	mA
COIL RESISTANCE	15 ± 3	OHM
MINIMUM SPL @ 10 CM	87	dBA
RESONANT FREQUENCY	$2,500 \pm 500$	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	LCP	-
TERMINAL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

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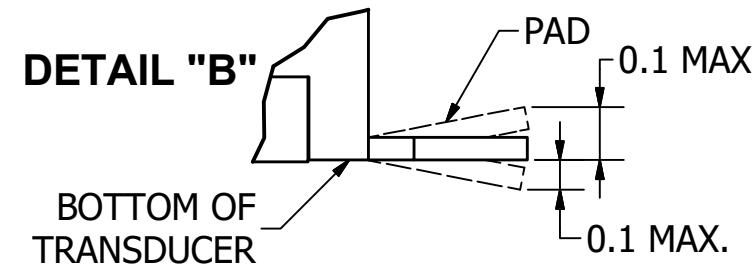
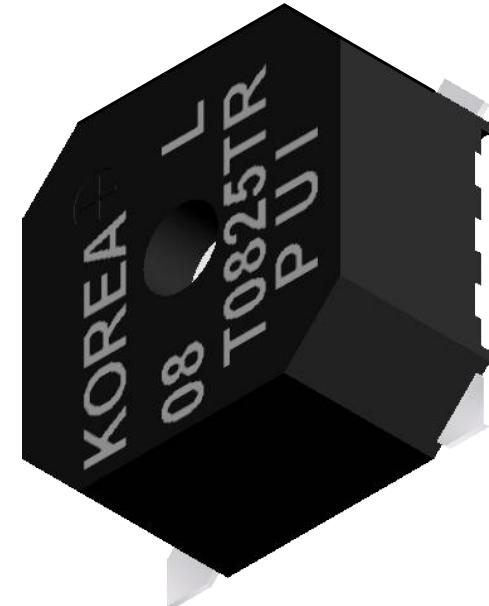
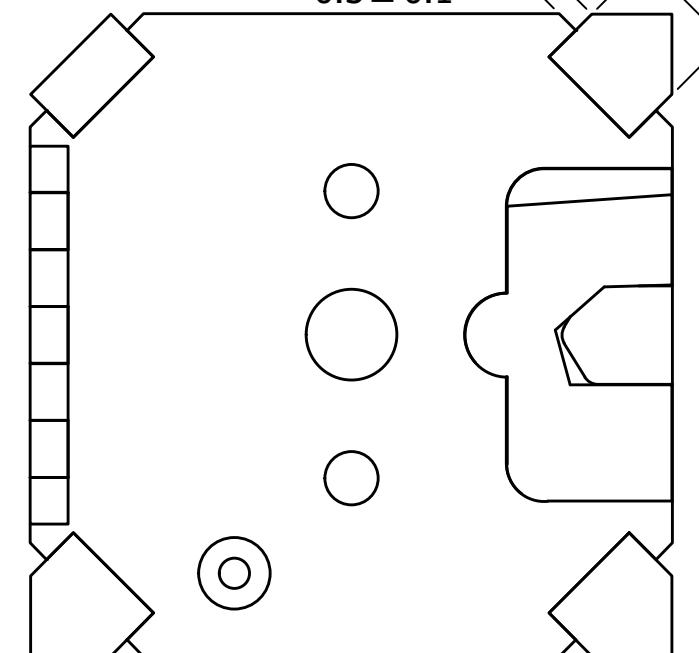
REVISION HISTORY

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 V _{p-p} TO V _{0-p}	8/31/2020	M.V.

A (5:1)



1.5 ± 0.1 (3)
0.3 ± 0.1



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	
 pui audio™ inc						SMT-0825-T-R			
Transducer (Electro-Mech)						Edition	-	Sheet 1 / 1	