

3541 Stop Eight Road • Dayton, Ohio 45414

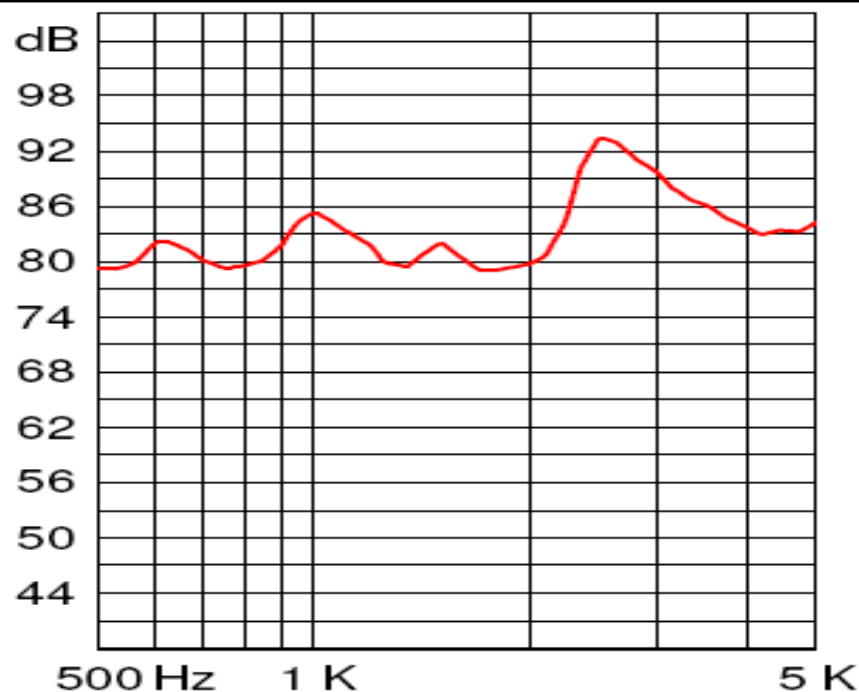
SMT-0825-S-4-R 8.5x8.5mm Transducer



Product Overview

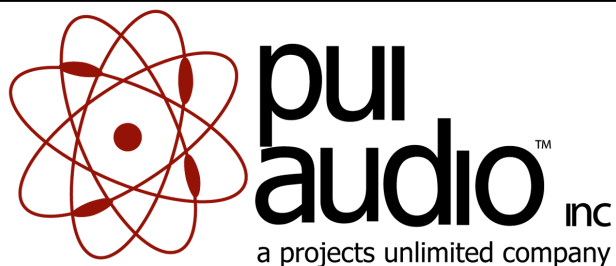
- Side-firing electromechanical transducer designed for 2.5 to 4.5 Vp-p
- Small 8.5 x 8.5mm footprint and 3mm height for thin, modern devices
- 85 dBA minimum output (3.6Vp-p @ 10 cm) and 2.5kHz resonant frequency
- Designed for reflow soldering using a lead-free profile

Frequency Response (3.6 Vp-p @ 0.1 meters)



RoHS COMPLIANT BY DESIGN





SMT-0825-S-4-R

8.5x8.5mm

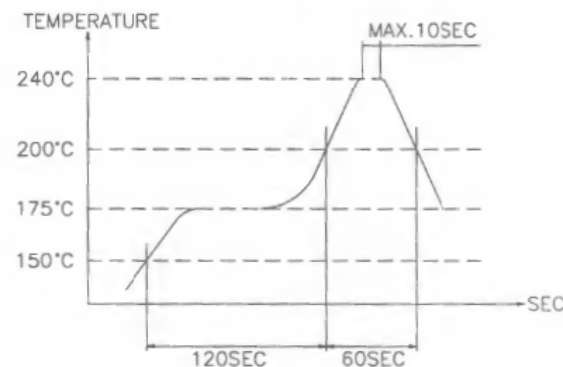
Transducer

Mechanical and Environment Testing

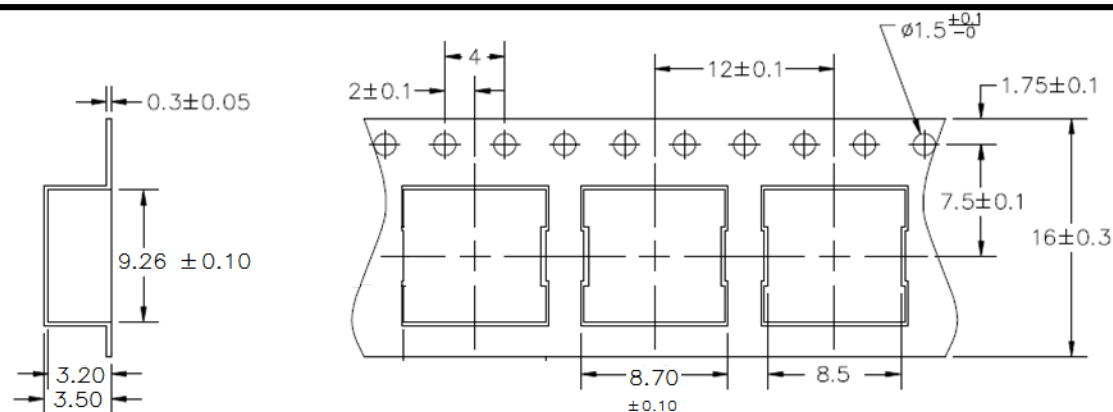
Test Description	Test Condition
High Temperature	85°C ($\pm 2^\circ\text{C}$) with random humidity for 96 hours
Low Temperature	-40°C ($\pm 2^\circ\text{C}$) with random humidity for 96 hours
Humidity	25°C to 60°C with 90% to 95% relative humidity for 12 hours, 10 cycles
Vibration	1.53 mm movement modulated 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

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

Recommended Reflow Profile

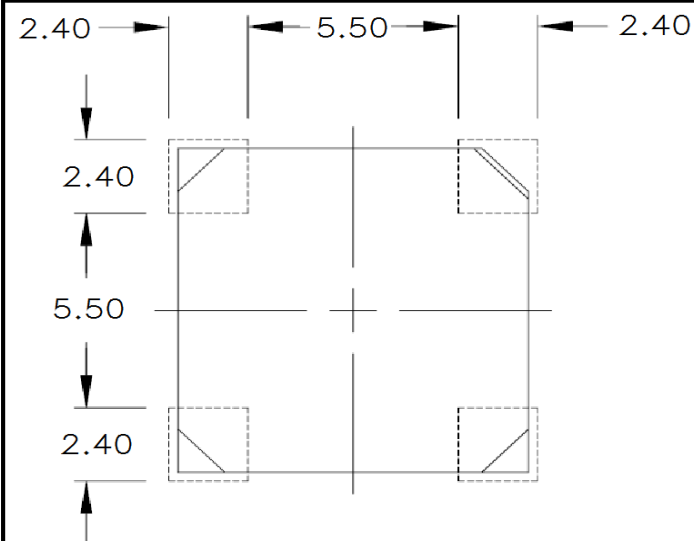


Tape Dimensions



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

Recommended Land Pattern



SPECIFICATIONS

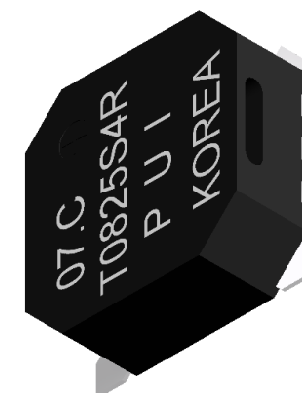
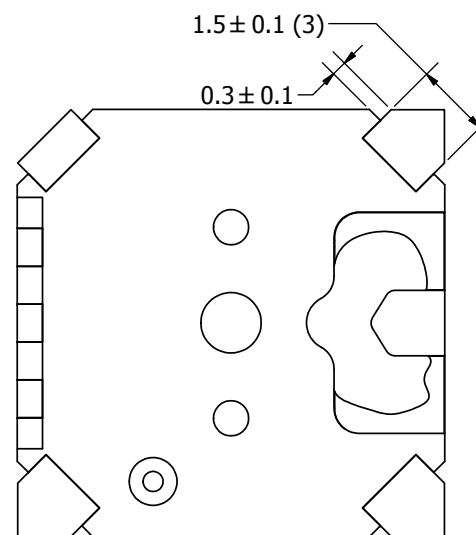
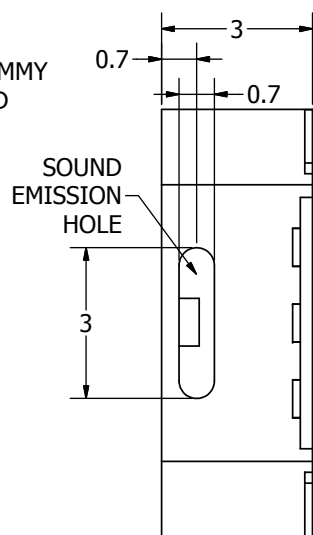
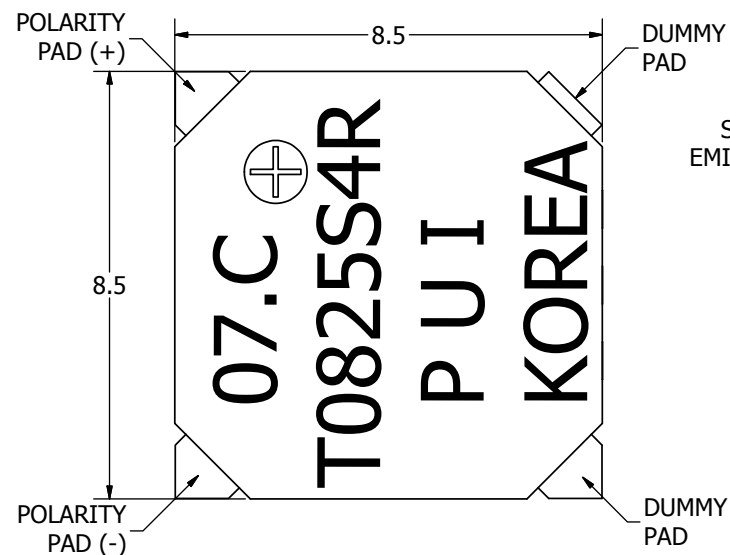
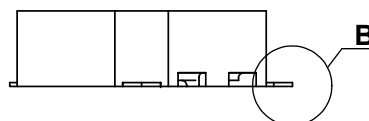
PARAMETERS	VALUES	UNIT
RATED VOLTAGE	3.6	Vp-p
OPERATING VOLTAGE RANGE	2.5 ~ 4.5	Vp-p
RATED CURRENT (MAX)	90	mA
COIL RESISTANCE	15 ± 3	OHM
MINIMUM SPL @ 10 CM	85	dB
RESONANT FREQUENCY	2,500 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	LCP	-
TERMINAL MATERIAL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

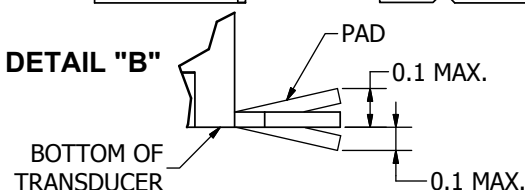
REVISION HISTORY

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.

A (5 : 1)



DETAIL "B"



NOTES:

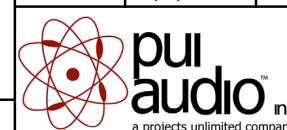
- ALL DIMENSIONS ARE IN MILLIMETERS.
- SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.
- THIS PART IS RoHS 2002/95/EC COMPLIANT.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS,
TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°.

SIZE
A3

SMT-0825-S-4-R.idw

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

Transducer (Electro-Mech)

Edition
-
Sheet
1 / 1

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[PUI Audio:](#)

[SMT-0825-S-4-R](#)