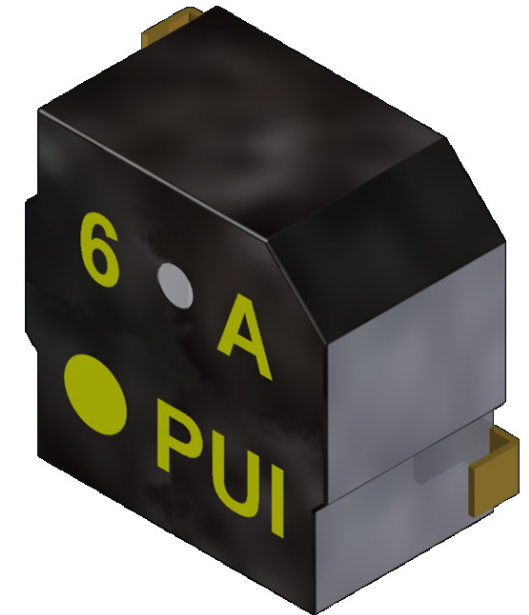


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## SMT-0540-T-2-R 5 x 5mm Transducer

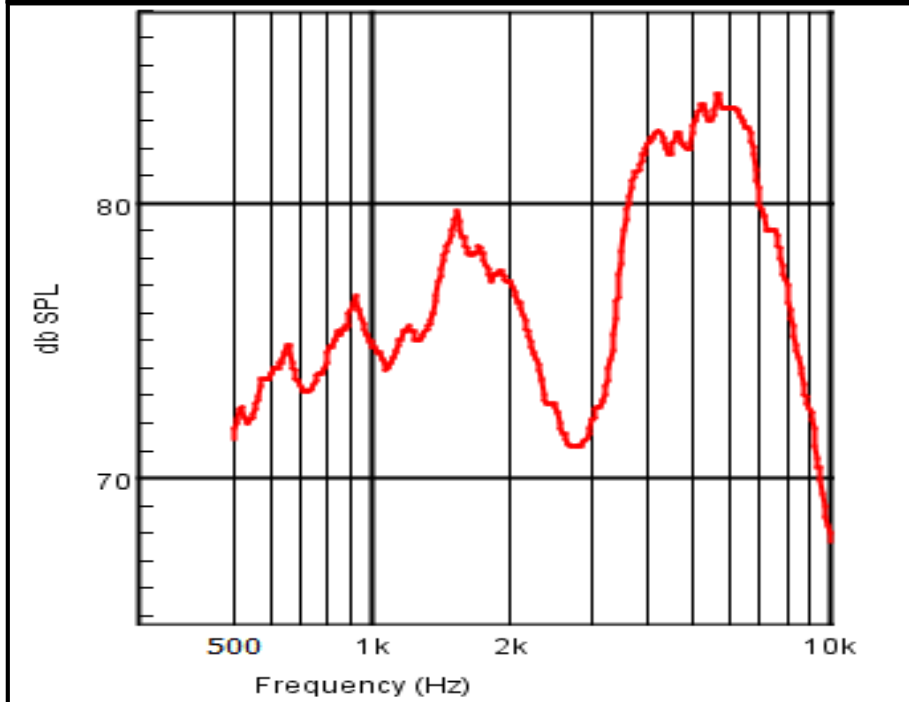


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### Product Overview

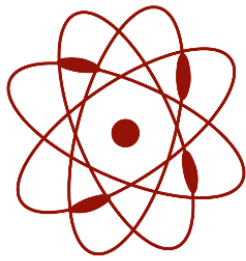
- Top-firing electromechanical transducer designed for 2 to 4 Vp-p
- Tiny 5 x 5mm footprint and 3mm height for thinner devices
- 78 dBA minimum output (3Vp-p @ 10 cm) and 4 kHz resonant frequency
- Designed for reflow soldering using a lead-free profile

Frequency Response (3 Vp-p @ 0.1 meters)



RoHS Compliant





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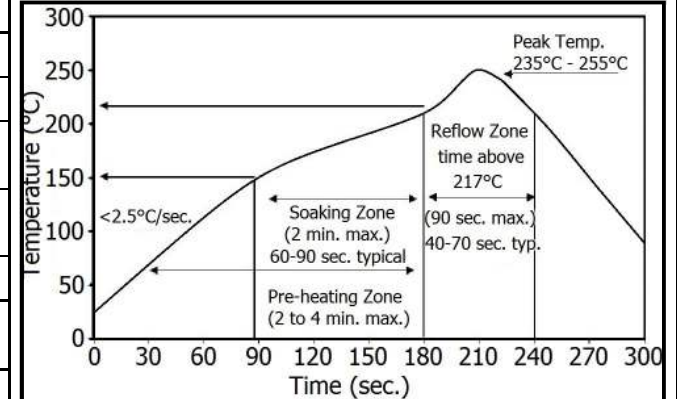
# SMT-0540-T-2-R

## 5 x 5mm Transducer

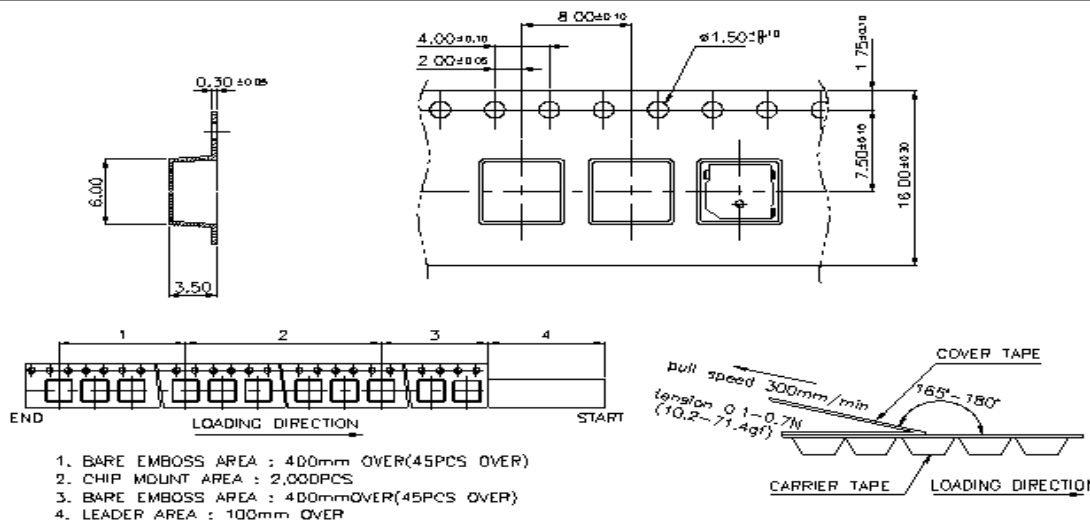
### Mechanical and Environment Testing

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

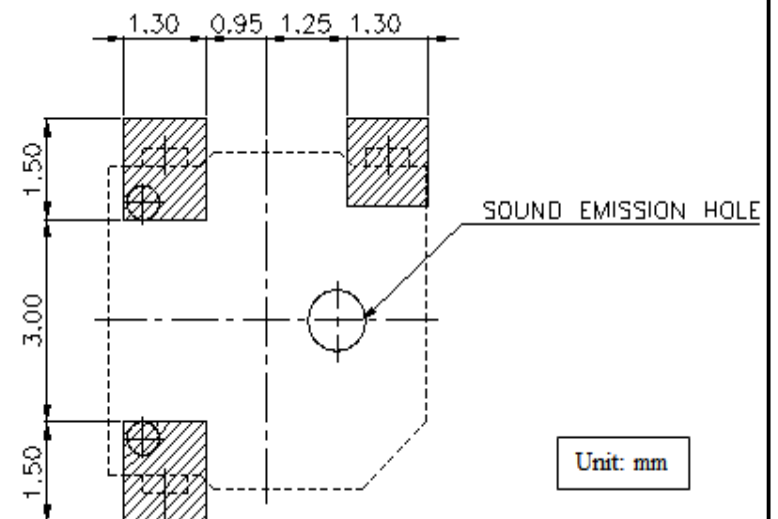
### Recommended Reflow Profile



### Tape Dimensions



### Recommended Land Pattern



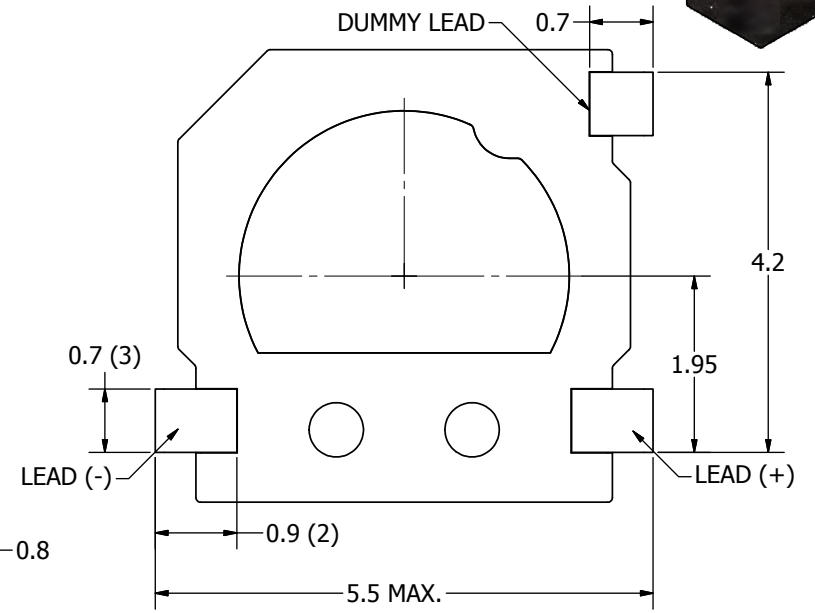
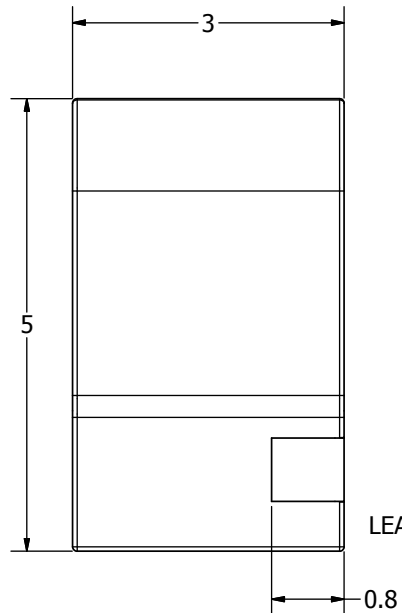
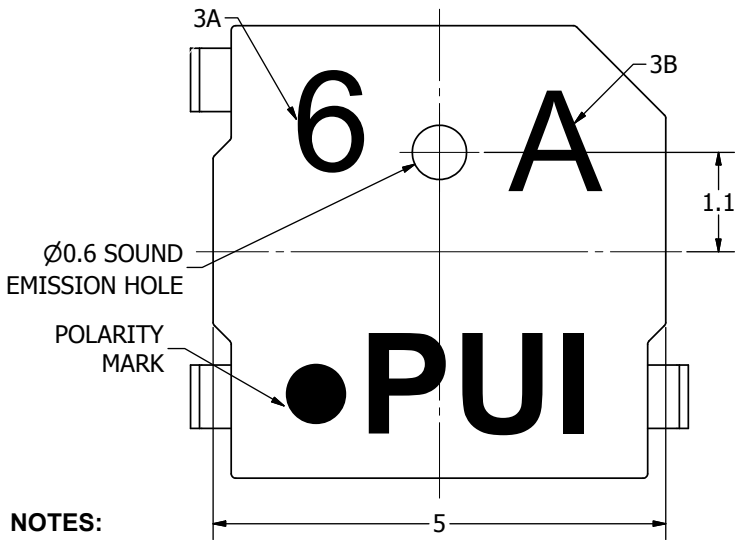
# SPECIFICATIONS

PARAMETERS	VALUES	UNIT
RATED VOLTAGE (SQUARE WAVE)	3	Vp-p
OPERATING VOLTAGE RANGE	2 ~ 4	Vp-p
RATED CURRENT (MAX)	100	mA
COIL RESISTANCE	12 ± 2	OHM
MINIMUM SPL @ 10 CM	78	dBA
RESONANT FREQUENCY	4,000 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +70	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	LCP	-
TERMINAL MATERIAL	Au PLATED PHOSPHOR BRONZE	-
WEIGHT	0.3	grams

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# REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	12/6/2004	
A	ADDED TERMINAL MATERIAL PLATING	1/18/2005	R.W.
B	UPDATED RoHS AND TOLERANCE	5/9/2005	R.W.
C	UPDATED TERMINAL DIMENSIONS	5/18/2005	B.R.
D	ADDED REFLOW TEMPERATURE	1/9/2006	B.R.
E	REVISED REFLOW TEMPERATURE	6/5/2006	B.R.
F	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	6/4/2010	B.R.
G	REVISED TERMINAL MATERIAL	5/11/2012	M.L.



- NOTES:**
- SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.
  - ALL DIMENSIONS ARE IN MILLIMETERS.
  - DATE CODE:  
A. FIRST DIGIT REPRESENTS THE NO. OF THE YEAR.  
B. LAST DIGIT REPRESENTS THE MONTH. (A-JAN~L-DEC.)
  - THIS PART IS RoHS 2002/95/EC COMPLIANT.
  - REFLOWABLE TO 260°C

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
		R.A.C.	12/6/2004	E.P.	12/6/2004	R.W.	12/6/2004	6/4/2010
SMT-0540-T-2-R.idw					<b>SMT-0540-T-2-R</b>			
Transducer (Electro-Mech)							Edition	Sheet
							-	1 / 1