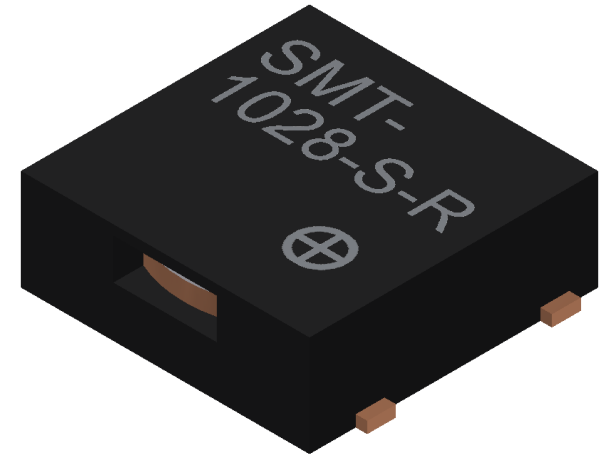




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## SMT-1427-S-R 14x11mm Transducer

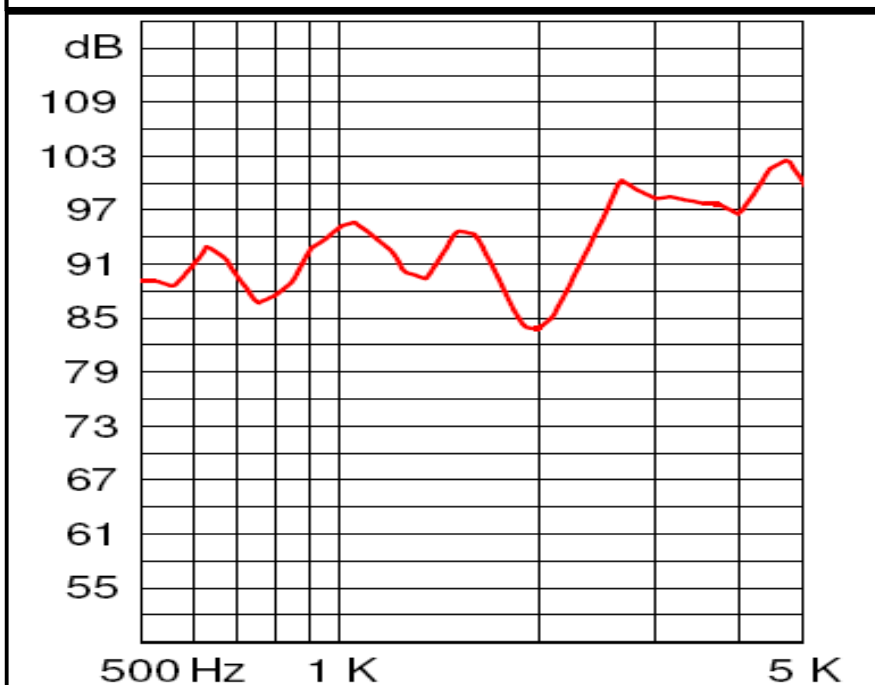


3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

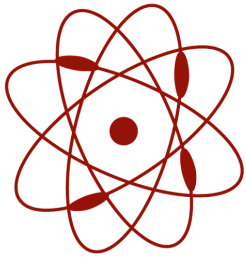
- Side-firing electromechanical transducer designed for 3 to 7 Vp-p
- Small footprint with loud 85 dB output
- 2,700 Hz resonant frequency targets most sensitive region of human hearing
- Designed for reflow soldering with a lead-free reflow profile

Frequency Response (3.6 Vp-p @ 0.1 meters)



RoHS 100% Pb-Free (Pb < 100 ppm)





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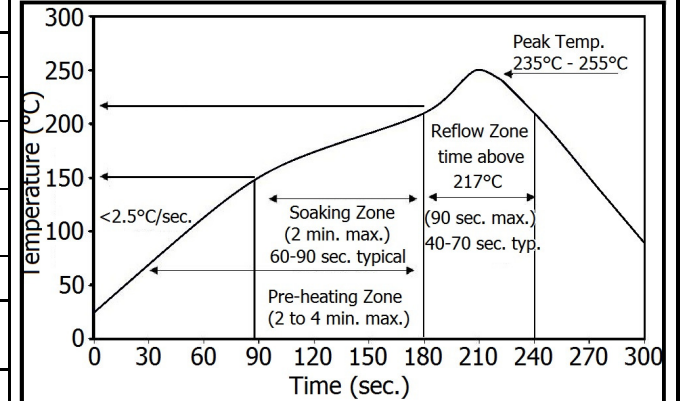
# SMT-1427-S-R

## 14x11m Transducer

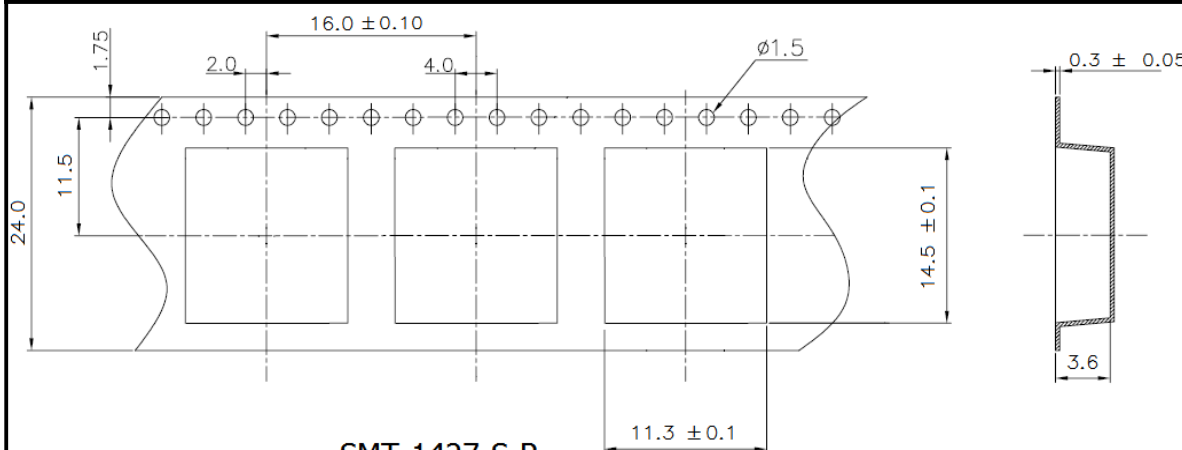
### Mechanical and Environment Testing

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

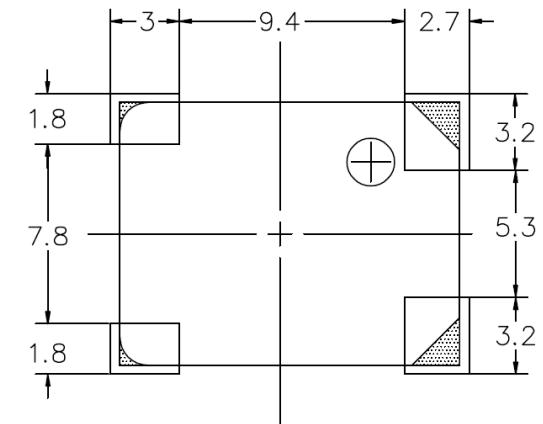


### Tape Dimensions



SMT-1427-S-R  
Tape Dimensions  
1,000 PCS/Reel

### Recommended Land Pattern



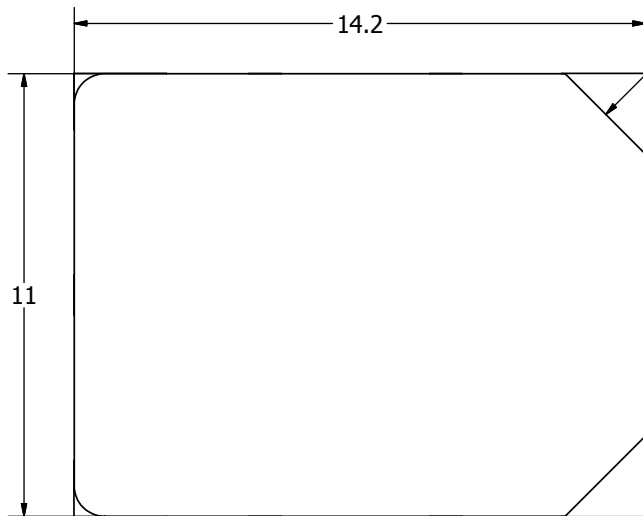
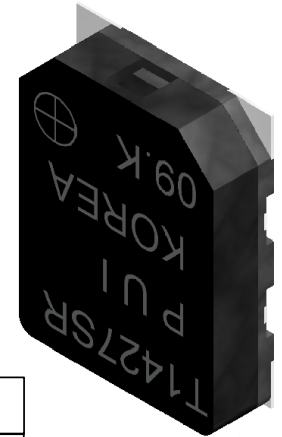
## SPECIFICATIONS

PARAMETERS	VALUES	UNITS
RATED VOLTAGE	5	Vp-p
OPERATING VOLTAGE RANGE	3 ~ 7	Vp-p
RATED CURRENT (MAX)	80	mA
COIL RESISTANCE	30 ± 4.5	OHM
MINIMUM SPL @ 10 CM	85	dBA
RESONANT FREQUENCY	2,700 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +60	°C
STORAGE TEMPERATURE	-40 ~ +85	°C
HOUSING MATERIAL	LCP	-
TERMINAL MATERIAL	Sn PLATED PHOSPHOR BRONZE	-
WEIGHT	0.7	grams

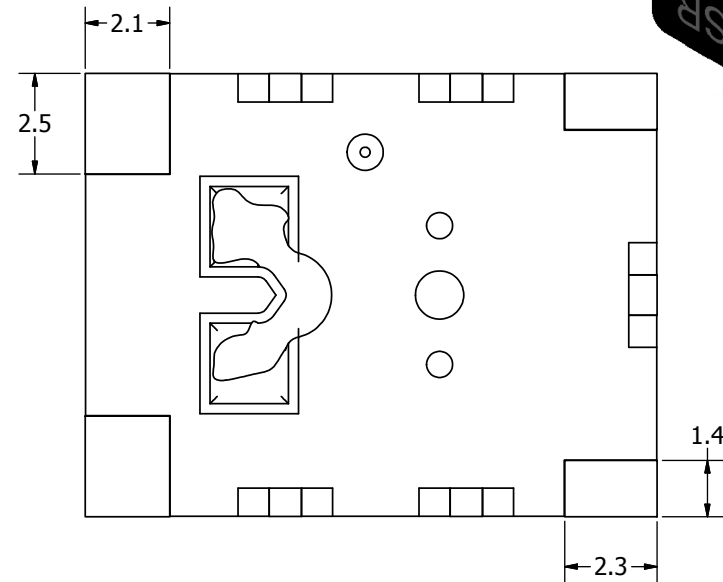
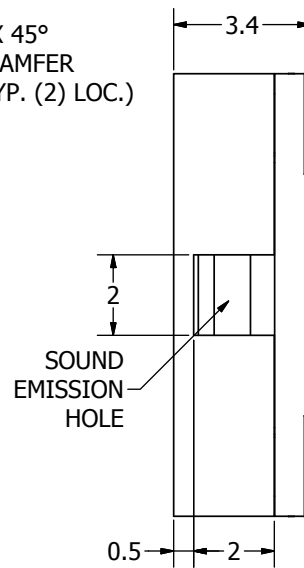
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## REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	5/9/2006	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	5/10/2010	B.R.



2 X 45°  
CHAMFER  
(TYP. (2) LOC.)



### NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL 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 <b>A3</b>	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
		J.D.	5/9/2006	E.P.	5/9/2006	B.R.	5/9/2006	5/10/2010
SMT-1427-S-R.idw						<b>SMT-1427-S-R</b>		
						Transducer (Electro-Mech)		Edition
				-	1 / 1			