

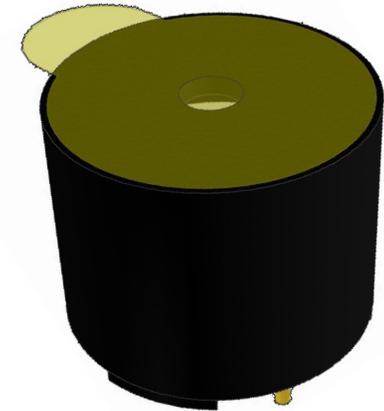
pui
audio™ inc
a projects unlimited company

AT-1220-TWT-5V-R 12mm Transducer

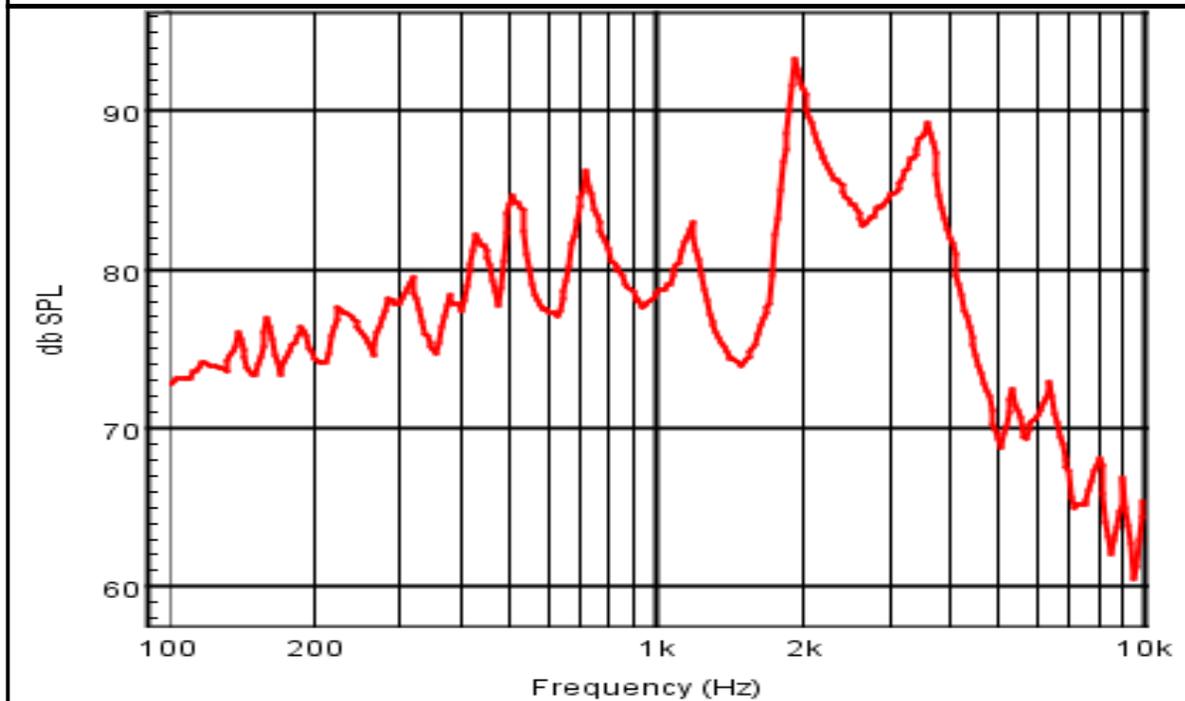
3541 Stop Eight Road • Dayton, Ohio 45414

Product Overview

- 12mm diameter electromagnetic transducer with 45 mA current draw
- 85 dBA minimum output (5 Vp-p @ 10 cm) and 2,048 Hz resonant frequency
- Noryl™ housing withstands Wave soldering temperatures
- Removable wash tag preserves performance

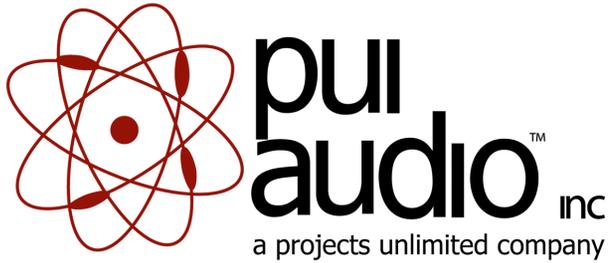


Frequency Response (5 Vp-p @ 0.1 meters)



RoHS Compliant





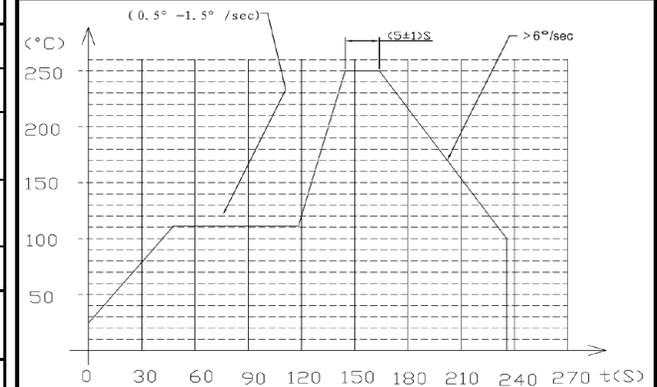
AT-1220-TWT-5V-R 12mm Transducer

Mechanical and Environment Testing

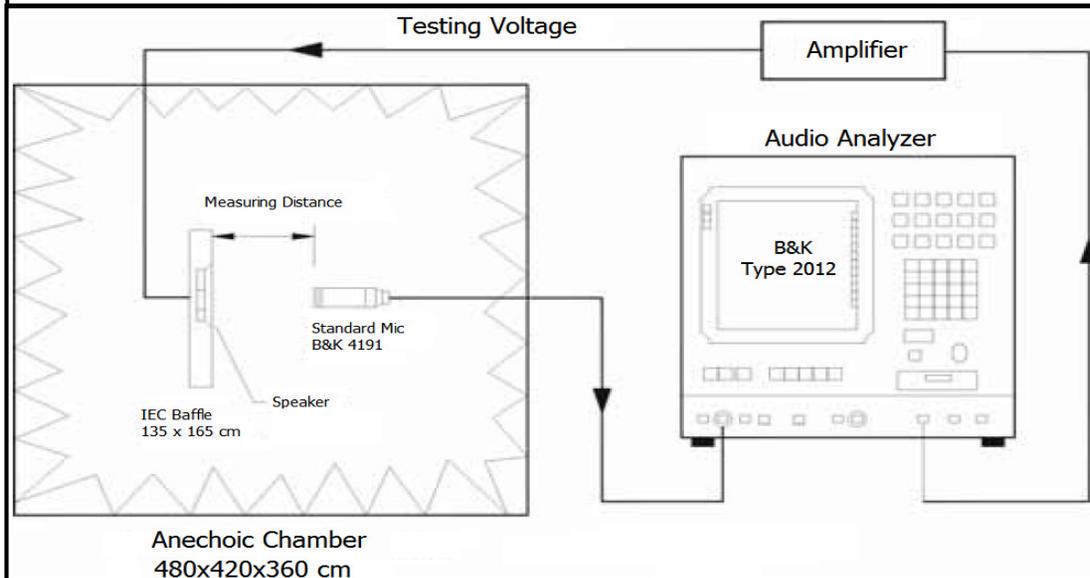
Test Description	Test Condition
High Temperature	70°C (±2°C) with random humidity for 96 hours
Low Temperature	-30°C (±2°C) with random humidity for 96 hours
Humidity	25°C to 70°C with 90% to 98% relative humidity for ten 24 hour cycles
Vibration	1.5 mm movement modulated at 10-55 Hz for 2 hours per axis
Drop Test	75 cm free fall onto wood board, 3 cycles per axis
Temperature Cycle Test	-30°C to 70°C, ten 60 minute cycles

After tests, part shall rest for 2 hours. Parts are then tested for clean, pure tones.

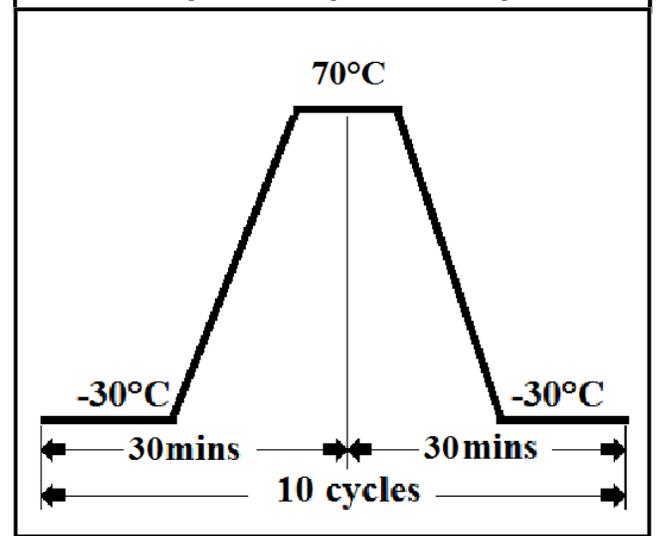
Wave Solder Profile



Frequency Response and SPL Measurement Setup



Temperature Cycle Test Graph



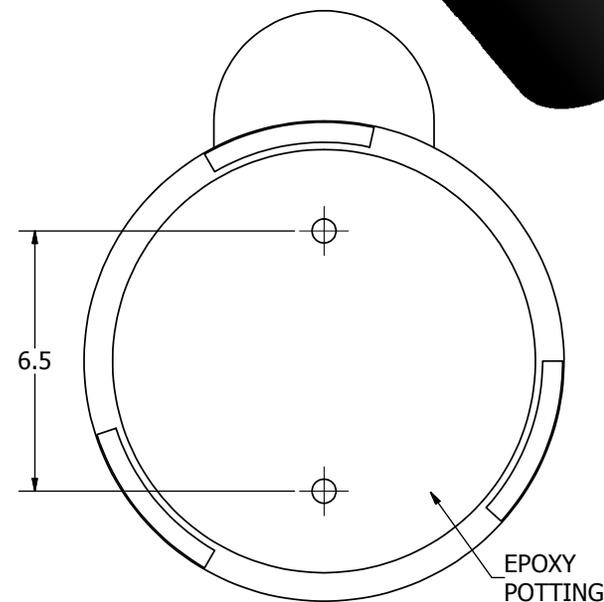
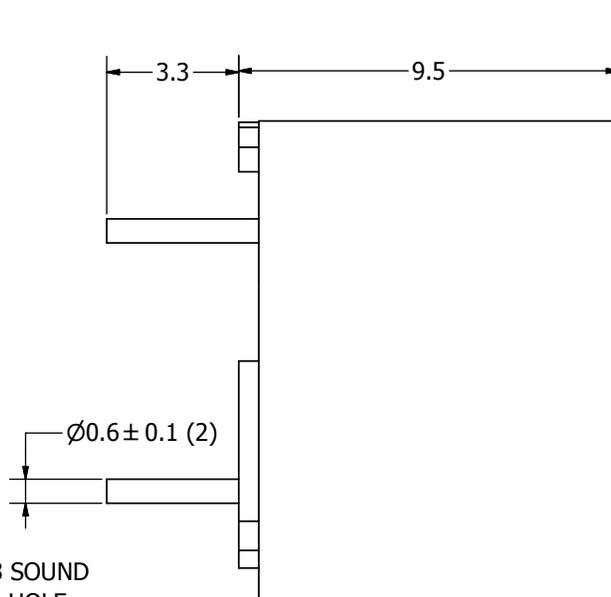
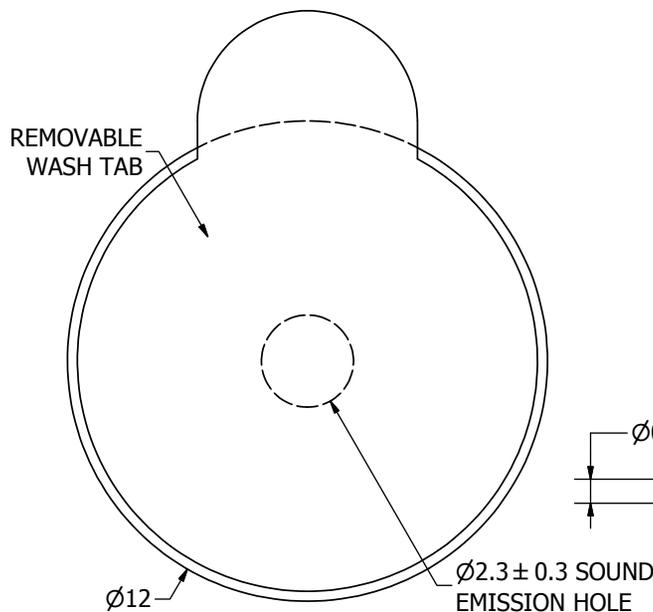
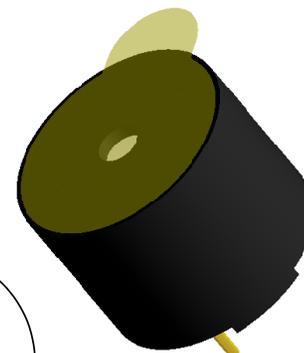
SPECIFICATIONS

PARAMETERS	VALUES	UNIT
RATED VOLTAGE	5	Vp-p
OPERATING VOLTAGE RANGE	3 ~ 8	Vp-p
RATED CURRENT (MAX)	45	mA
COIL RESISTANCE	47 ± 7	OHM
MINIMUM SPL @ 10 CM	85	dB
RESONANT FREQUENCY	2,048 ± 200	Hz
OPERATING TEMPERATURE	-20 ~ +60	°C
STORAGE TEMPERATURE	-30 ~ +70	°C
HOUSING MATERIAL	NORYL	-
TERMINAL MATERIAL	Au PLATED PHOSPHOR BRONZE	-
WEIGHT	2	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	8/5/2005	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	4/7/2008	B.R.



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	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date		
	A3	J.A.F.	8/5/2005	B.R.	8/5/2005	E.P.	8/5/2005	4/7/2008		
AT-1220-TWT-5V-R.idw		 pui audio a projects unlimited company		AT-1220-TWT-5V-R			Transducer (Electro-Mech)		Edition -	Sheet 1 / 1

Mouser Electronics

Authorized Distributor

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

[PUI Audio:](#)

[AT-1220-TWT-5V-R](#)