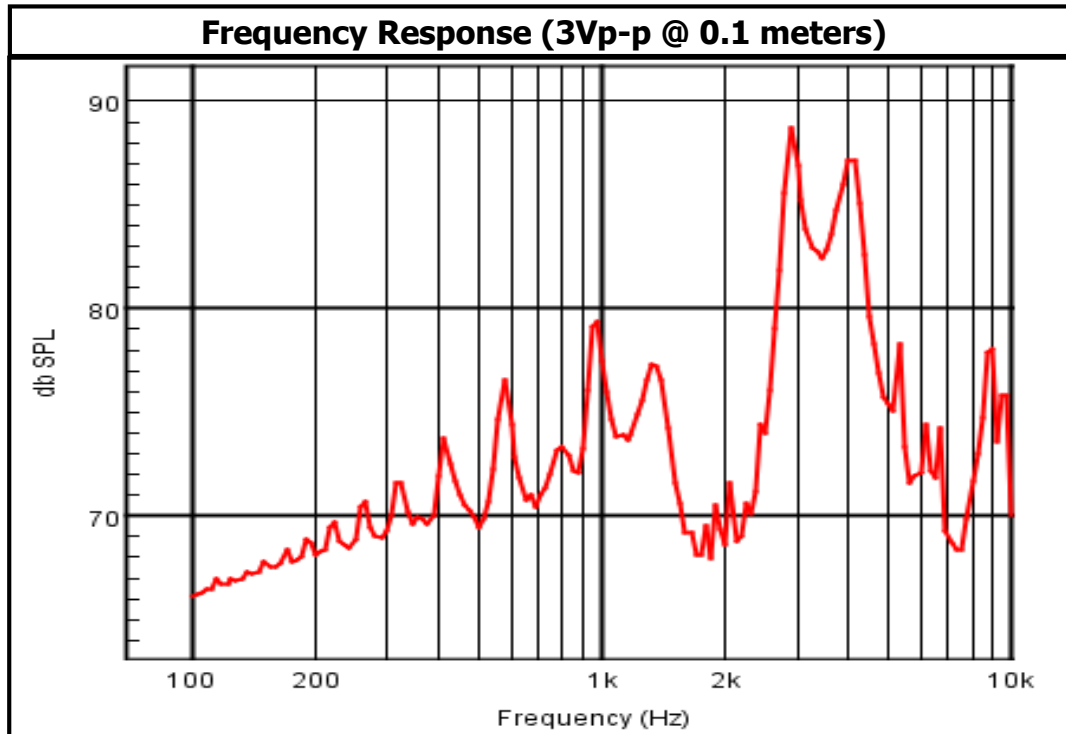
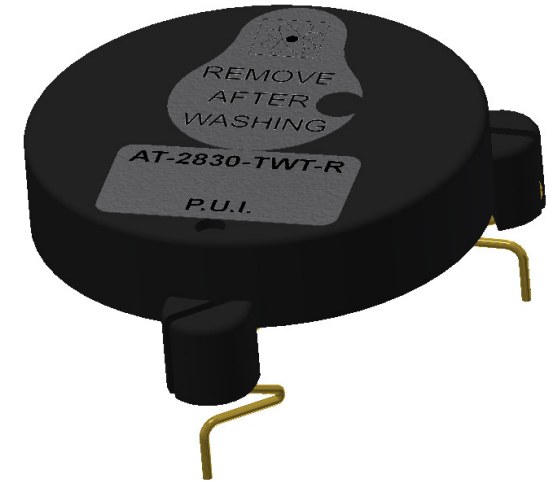


## AT-2830-TWT-R 28mm Transducer

3541 Stop Eight Road • Dayton, Ohio 45414

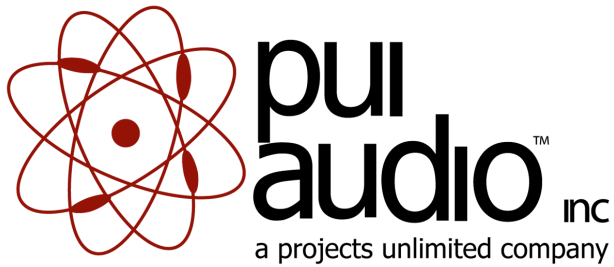
### Product Overview

- 28.5mm diameter piezo-electric transducer with thru-hole pins
- 93 dBA minimum output (12 Vp-p @ 10 cm) and 3 kHz resonant frequency
- ABS housing and removable wash tag preserves performance



RoHS Compliant





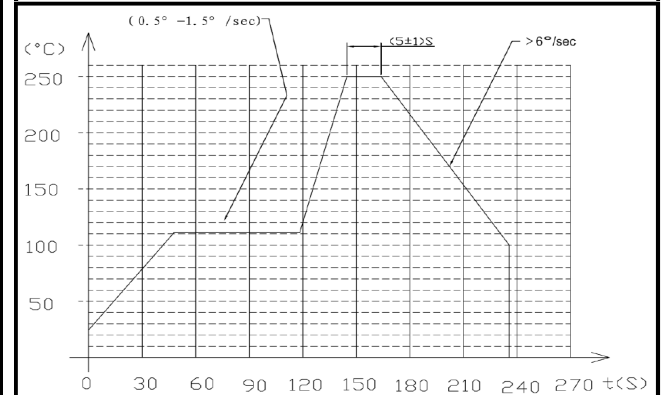
# AT-2830-TWT-R 28mm Transducer

## Mechanical and Environment Testing

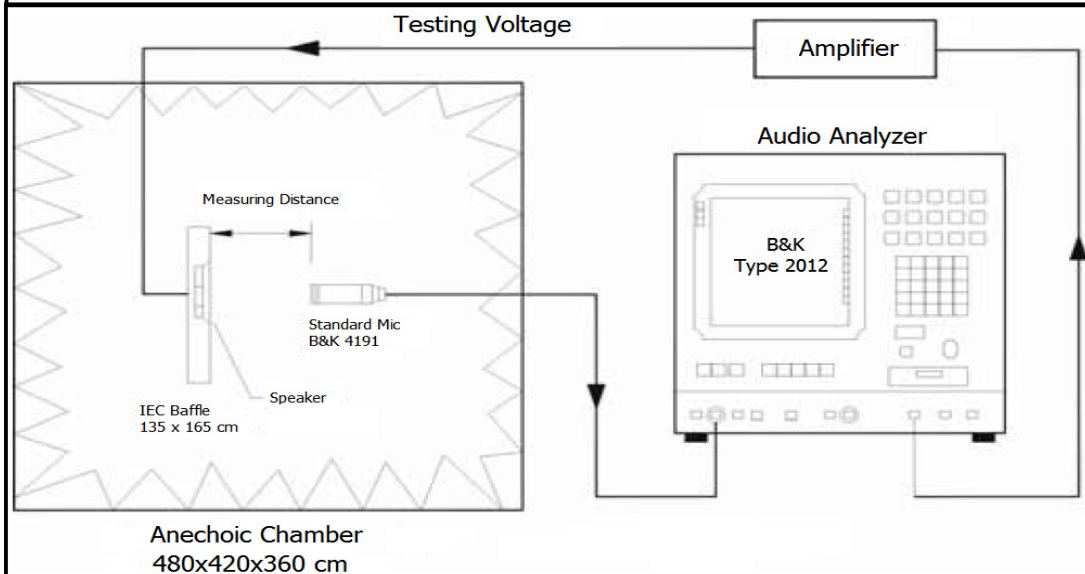
Test Description	Test Condition
High Temperature	95°C ( $\pm 2^\circ\text{C}$ ) with random humidity for 240 hours
Low Temperature	-40°C ( $\pm 2^\circ\text{C}$ ) with random humidity for 240 hours
Humidity	40°C ( $\pm 2^\circ\text{C}$ ) with 90% to 95% relative humidity for 240 hours
Vibration	0.75 mm movement modulated at 10-55 Hz for 3 hours
Drop Test	100 cm free fall onto wood board, 10 cycles
Temperature Cycle Test	-40°C to 95°C, ten 3 hour cycles

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

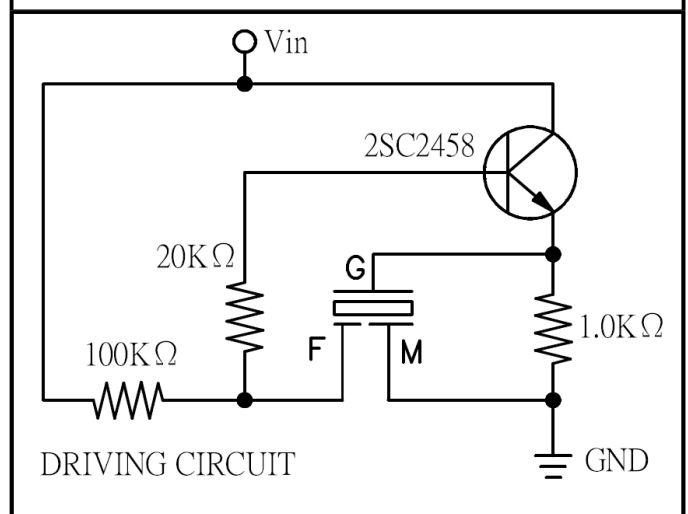
## Wave Solder Profile



## Frequency Response and SPL Measurement Setup



## Recommended Drive Circuit



# SPECIFICATIONS

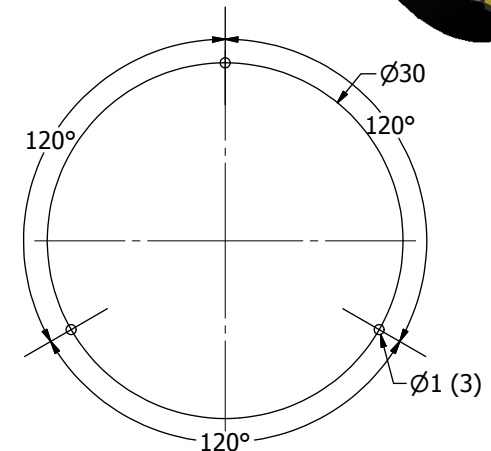
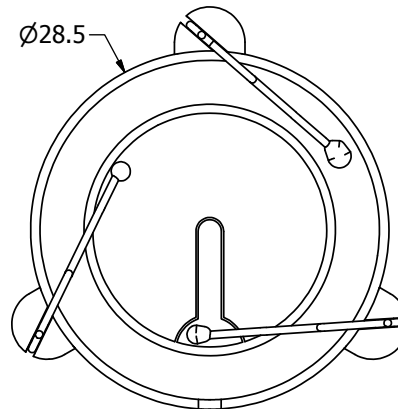
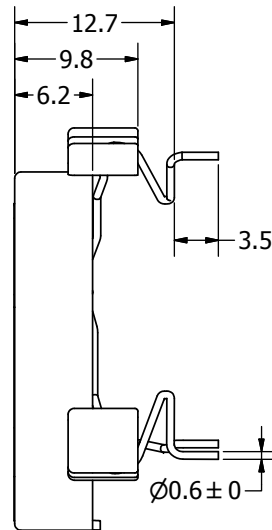
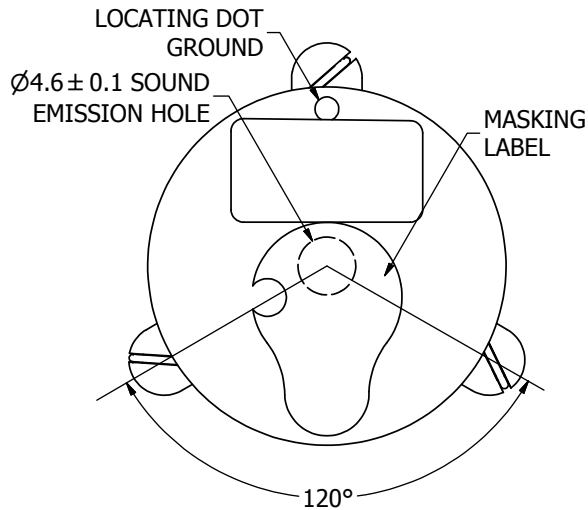
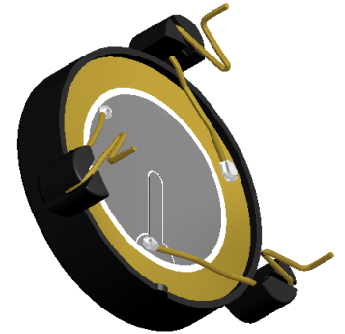
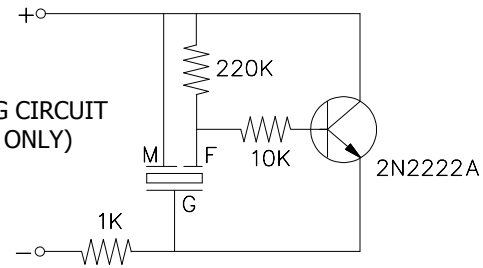
PARAMETERS	VALUES	UNITS
RATED VOLTAGE	12	Vp-p
OPERATING VOLTAGE RANGE	3 ~ 28	Vp-p
RATED CURRENT (MAX)	8	mA
CAPACITANCE	20,000 ± 30%	pF
MINIMUM SPL @ 10 CM	93	dBA
RESONANT FREQUENCY	3,000 ± 500	Hz
OPERATING TEMPERATURE	-30 ~ +85	°C
STORAGE TEMPERATURE	-40 ~ +95	°C
HOUSING MATERIAL	ABS	-
TERMINAL MATERIAL	Au PLATED PHOSPHER BRONZE	-
WEIGHT	3.7	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	9/12/2005	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	10/17/2007	B.R.

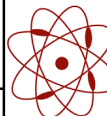
BASIC DRIVING CIRCUIT  
(FOR TESTING ONLY)



P.C. PIN HOLE PATTERN

## 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.
4. PART WASHABLE USING DEIONIZED WATER, OR PURE ISOPROPYL ALCOHOL.

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.A.F.	9/12/2005	B.R.	9/13/2005	E.P.	9/13/2005	10/17/2007		
AT-2830-TWT-R.idw		 <b>pui audio</b> a projects unlimited company		<b>AT-2830-TWT-R</b>			Transducer (Piezo)		Edition -	Sheet 1 / 1