



**pui audio**™ inc  
a projects unlimited company

## AI-1440-TWT-12V-R 14mm Indicator

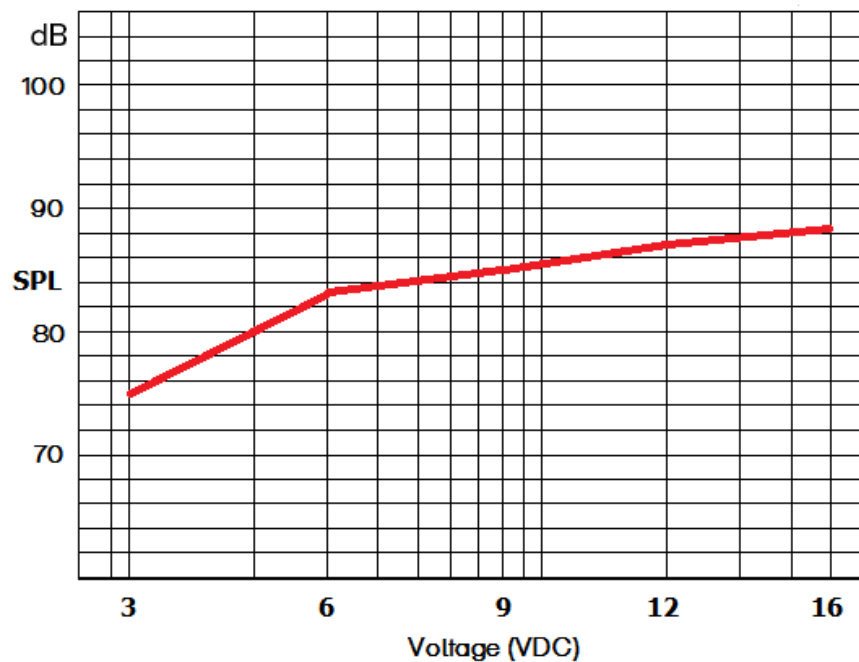
3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

- 14mm diameter, 3-16 VDC self-drive indicator
- 80 dBA minimum output (12 VDC @ 10 cm) and 4 kHz continuous tone
- Noryl™ housing withstands Wave soldering temperatures
- Removable wash tag preserves performance

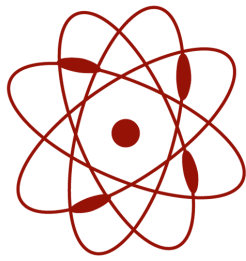


**SPL vs Voltage (measured @ 10 cm)**



An Institute of the EICC and GeSI





**pui audio**™ inc  
a projects unlimited company

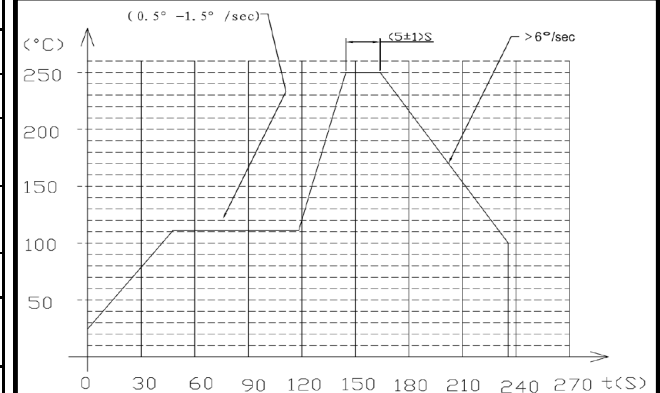
# AI-1440-TWT-12V-R 14mm Indicator

## Mechanical and Environment Testing

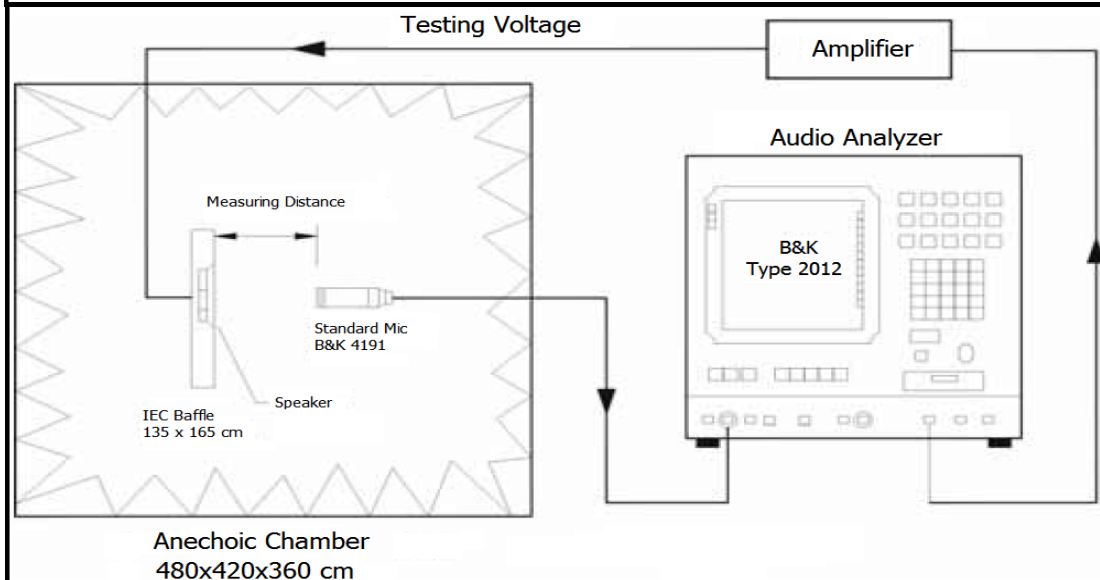
Test Description	Test Condition
High Temperature	85°C (±2°C) with random humidity for 96 hours
Low Temperature	-25°C (±2°C) with random humidity for 96 hours
Humidity	40°C (±2°C) with 90% to 95% relative humidity for 96 hours
Vibration	0.75 mm movement modulated at 10-55 Hz for 3 hours
Drop Test	100 cm free fall onto wood board, 10 cycles
Temperature Cycle Test	-30°C to 80°C, 100 cycles

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

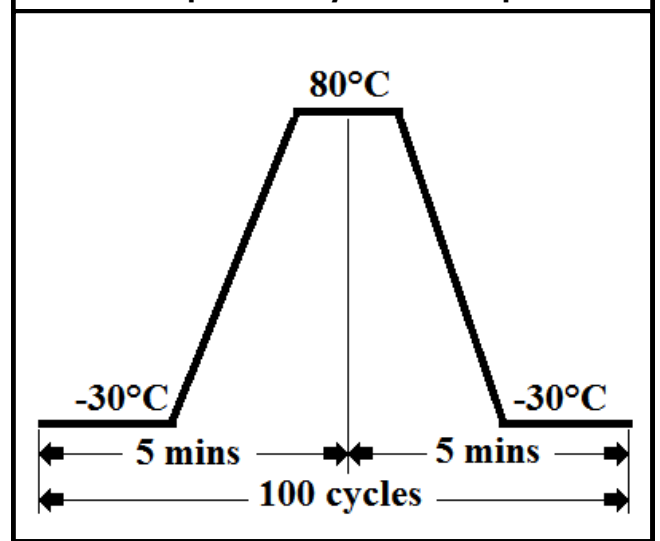
## Wave Solder Profile



## Frequency Response and SPL Measurement Setup



## Temperature Cycle Test Graph



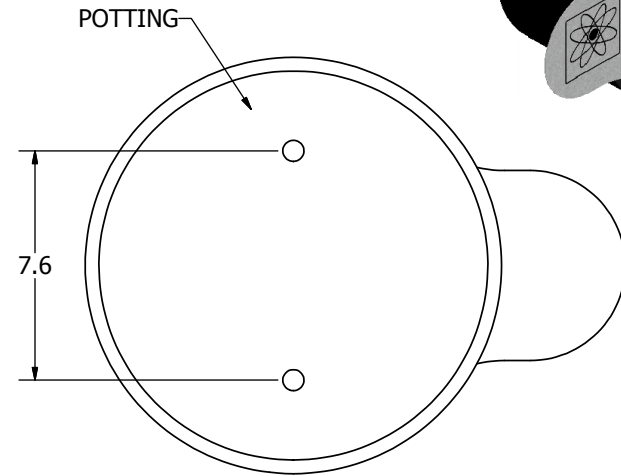
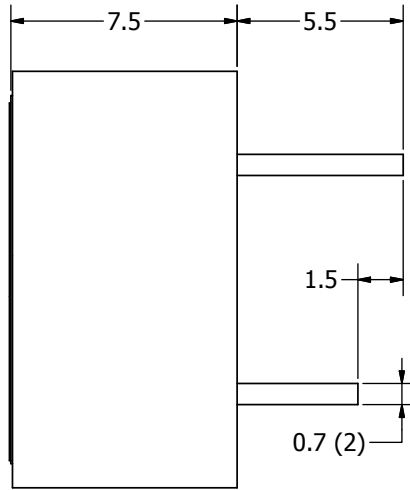
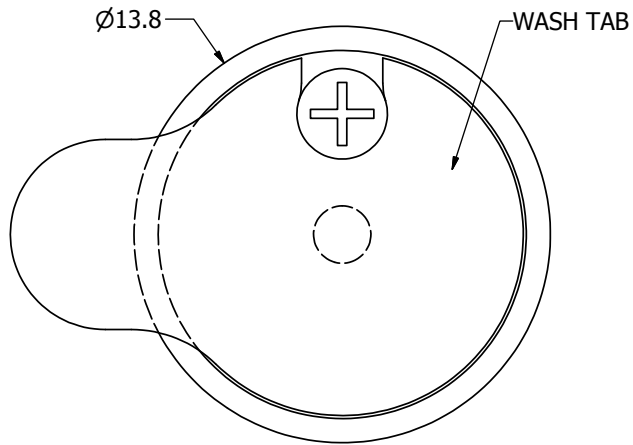
# SPECIFICATIONS

PARAMETERS	VALUES	UNITS
RATED VOLTAGE	12	Vdc
OPERATING VOLTAGE RANGE	3 ~ 16	Vdc
RATED CURRENT (MAX)	7	mA
MINIMUM SPL @ 10 CM	80	dBA
RESONANT FREQUENCY	4,000 ± 500	Hz
TONE OR PULSE RATE	CONTINUOUS	0 pulse /second
OPERATING TEMPERATURE	-20 ~ +70	°C
STORAGE TEMPERATURE	-30 ~ +80	°C
HOUSING MATERIAL	NORYL	-
TERMINAL MATERIAL	Sn PLATED RED COPPER	-
WEIGHT	1	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	8/19/2004	
A	REVISED RoHS STATEMENT	5/27/2005	B.R.
B	REVISED DIMENSION SIZE AND STYLE	11/28/2005	B.R.
C	REVISED TERMINAL MATERIAL	3/20/2006	B.R.
D	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	10/9/2007	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 <b>A3</b>	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
		J.D.	8/19/2004			R.W.	8/20/2004	10/9/2007
AI-1440-TWT-12V-R.idw		 <b>pui audio</b> a projects unlimited company		<b>AI-1440-TWT-12V-R</b> Indicator			Edition	Sheet
							-	1 / 1

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Piezo Buzzers & Audio Indicators](#) category:*

*Click to view products by [PUI Audio](#) manufacturer:*

Other Similar products are found below :

[6-4](#) [68S1240-PA](#) [MBA-624](#) [FDG06PSLLF](#) [FDG111PLF](#) [F/EM12PLF](#) [F/NRMB 24 BLACK LF](#) [PF-35N29WQ](#) [PFD-21A29W](#) [PFD-27A35PQ](#) [PL-21N30WQ](#) [PL-27A35PSQ](#) [PLD-21N30W](#) [PLD-21N30WQ](#) [PS-531Q](#) [PT-3534FP](#) [EBPT-401](#) [B822B](#) [PB-1220PEQ](#) [S6109](#) [SBM616PR](#) [SC110E](#) [SC2036ACP](#) [SC616N-2](#) [SC628FW](#) [SC628MPG](#) [SC648D](#) [SCS045MD9DT3S](#) [FCM12PLF](#) [F/EB20P-DR LF](#) [F/SMD03A LF](#) [FSMD8585JSLF](#) [F/SU 21-02 LF](#) [F/TCW 12 WITH LABEL LF](#) [PFD-27N36W](#) [PKM22EPPH40S1-B0](#) [PKM35-4A0](#) [PL-35N29WQ](#) [PS-552Q](#) [CM-5](#) [REF-202](#) [B/SE 128 RED LF](#) [KBS-20DA-7AS](#) [KBS-27DA-5C-105](#) [LSC628ANR](#) [03-810.001](#) [RTO-1R07-001](#) [PL-21N31PQ](#) [F-B-P1405ISB LF](#) [B/CP 28B BLACK LF](#)