

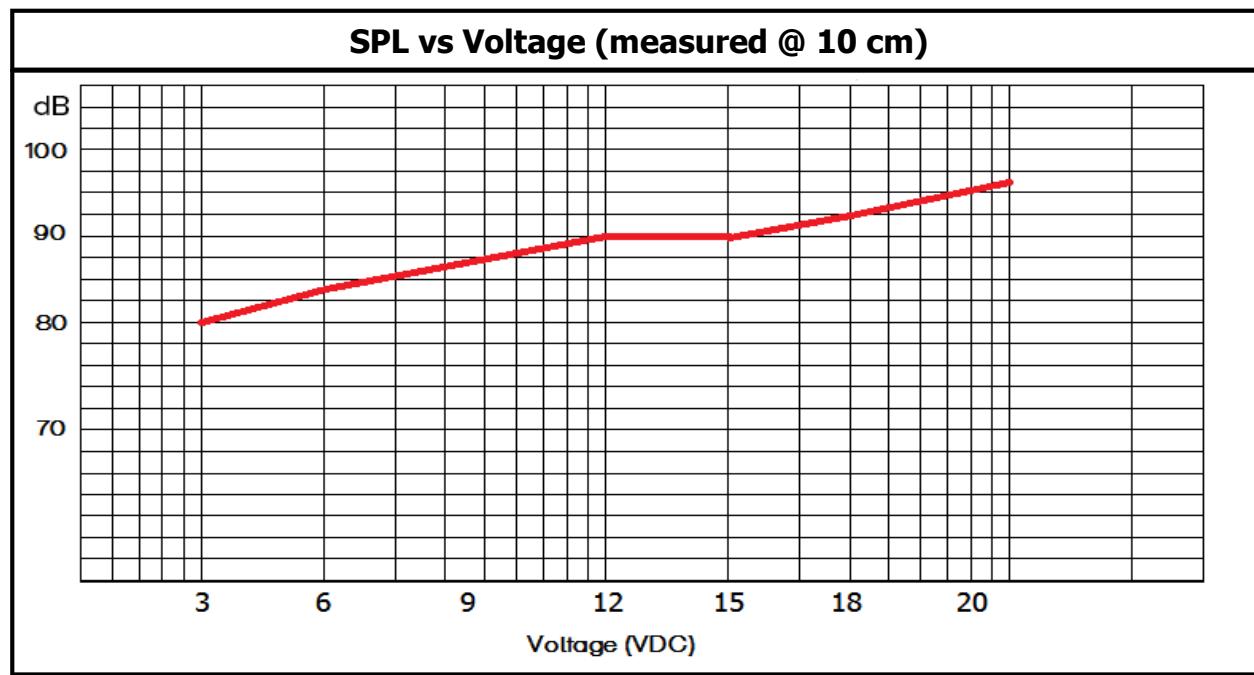
3541 Stop Eight Road • Dayton, Ohio 45414

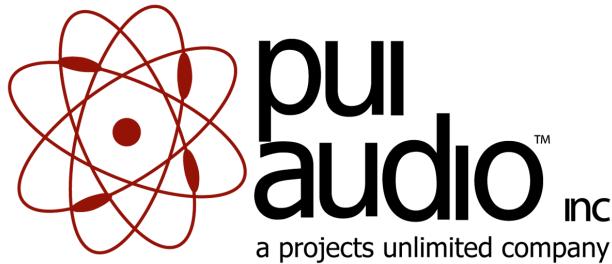
AI-2331-TWT-R 23mm Indicator



Product Overview

- 23mm diameter, 3-20 VDC self-drive indicator
- 85 dBA minimum output (12 VDC @ 10 cm)
- 3,100 Hz continuous tone for ultimate audibility
- Noryl® housing withstands Wave soldering temperatures
- Removable wash tag preserves performance





AI-2331-TWT-R

23mm Indicator

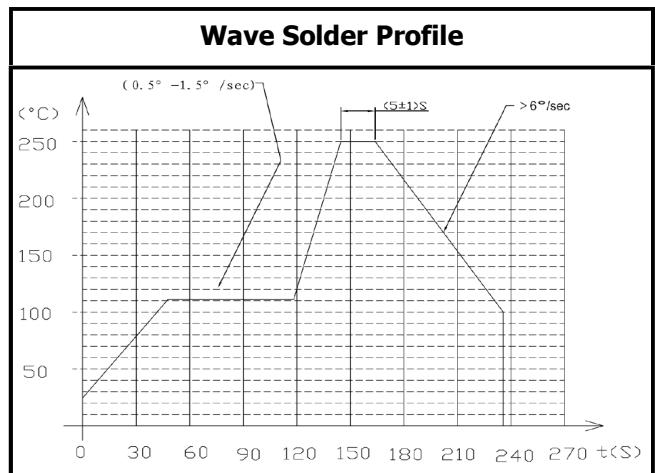
a projects unlimited company

Mechanical and Environment Testing

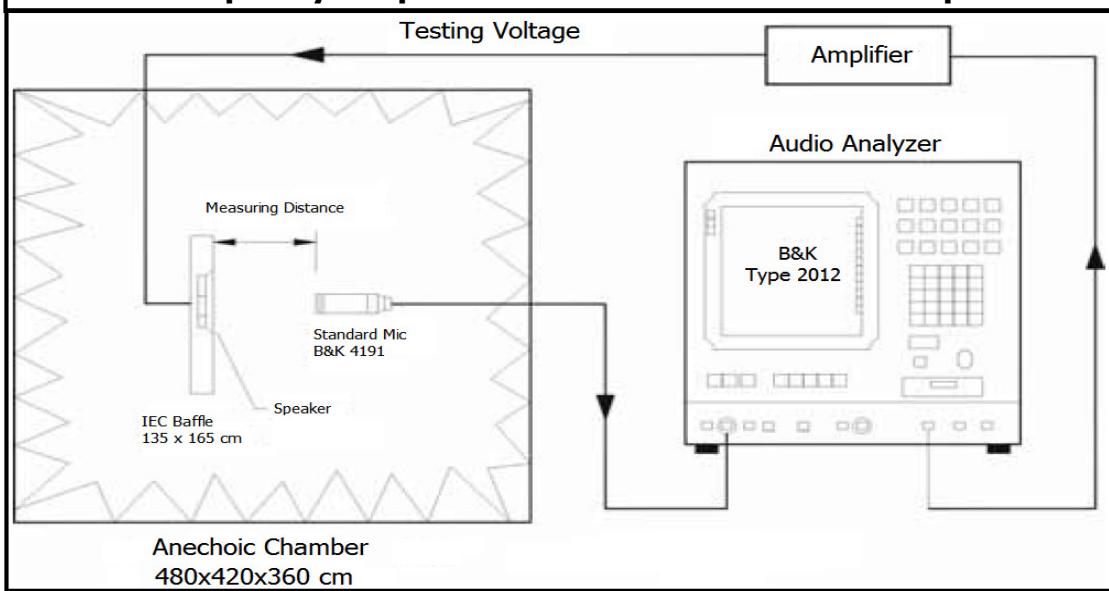
Test Description	Test Condition
High Temperature	70°C ($\pm 2^\circ\text{C}$) with random humidity for 96 hours
Low Temperature	-20°C ($\pm 2^\circ\text{C}$) with random humidity for 96 hours
Humidity	40°C ($\pm 2^\circ\text{C}$) with 90% to 95% relative humidity for 96 hours
Vibration	0.75 mm movement modulated at 10-55 Hz for 3 hours
Drop Test	100 cm free fall onto wood board, 10 cycles
Temperature Cycle Test	-20°C to 70°C, 100 cycles

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

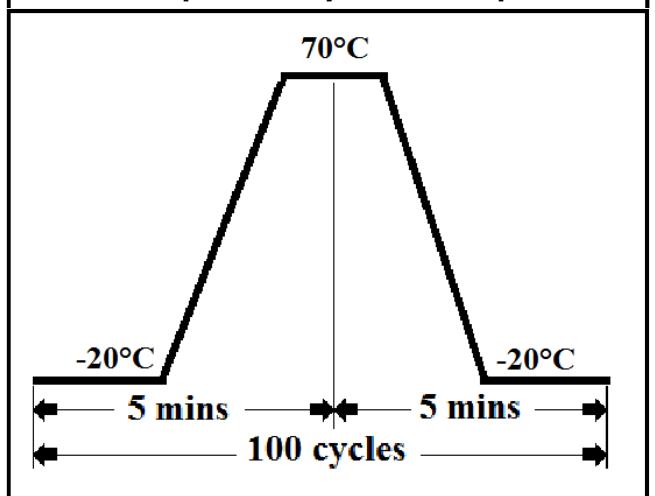
Wave Solder Profile



Frequency Response and SPL Measurement Setup



Temperature Cycle Test Graph



SPECIFICATIONS

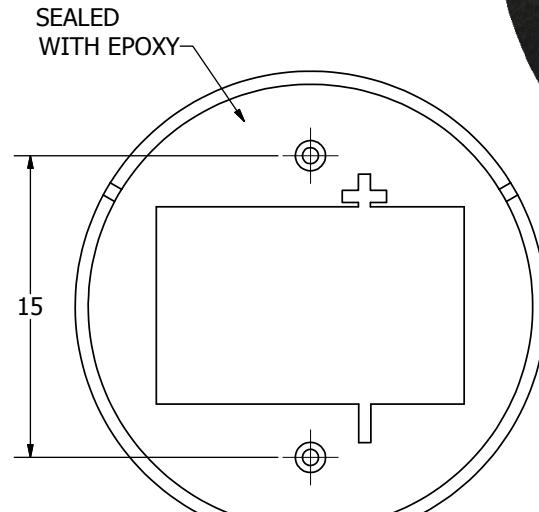
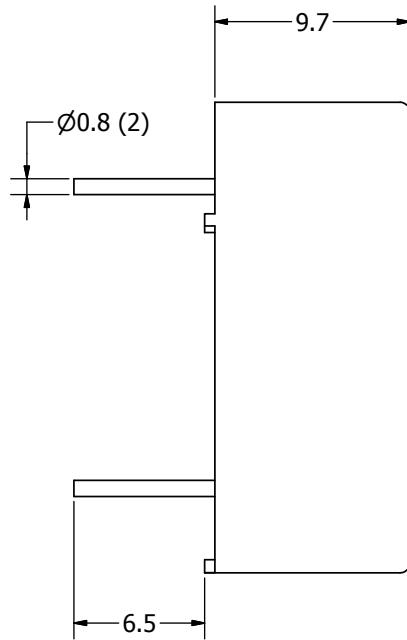
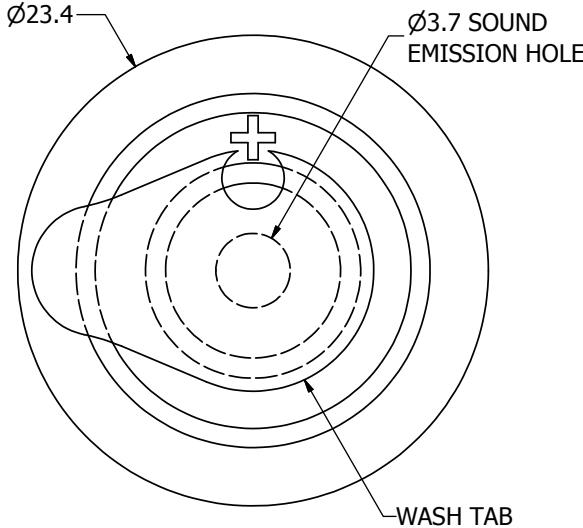
PARAMETERS	VALUES	UNITS
RATED VOLTAGE	12	Vdc
OPERATING VOLTAGE RANGE	3 ~ 20	Vdc
RATED CURRENT (MAX)	15	mA
MINIMUM SPL @ 10 CM	85	dBA
RESONANT FREQUENCY	3,100 ± 500	Hz
TONE OR PULSE RATE	CONTINUOUS	0 pulse /sec
OPERATING TEMPERATURE	-20 ~ +60	°C
STORAGE TEMPERATURE	-20 ~ +70	°C
HOUSING MATERIAL	NORYL	-
TERMINAL MATERIAL	Sn PLATED COPPER	-
WEIGHT	3	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	8/23/2004	
A	ADDED DIMENSION	8/27/2004	R.W.
B	REMOVED LEAD FREE NOTE ADDED RoHS	8/10/2005	
C	REVISED TERMINAL MATERIAL	11/28/2006	R.W.
D	ADDED EPOXY SEAL NOTE	3/7/2007	B.R.
E	REVISED BODY HEIGHT DIMENSION	4/7/2008	B.R.
F	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	12/21/2008	B.R.
G	ADDED NOTE 4	2/17/2012	M.L.



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWL WITHOUT NOTICE.
3. THIS PART IS RoHS 2002/95/EC COMPLIANT.
4. PART IS NOT WASHABLE.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS,
TOLERANCES ARE ±0.5 AND
ANGLES ARE ±3°.

SIZE
A3

AI-2331-TWT-R.idw

 pui audio™ inc
a projects unlimited company

AI-2331-TWT-R

Indicator

Edition
-
Sheet
1 / 1

 pui audio™ inc
a projects unlimited company

Mouser Electronics

Authorized Distributor

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

[PUI Audio:](#)

[AI-2331-TWT-R](#)