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AI-2331-TWT-R 23mm Indicator

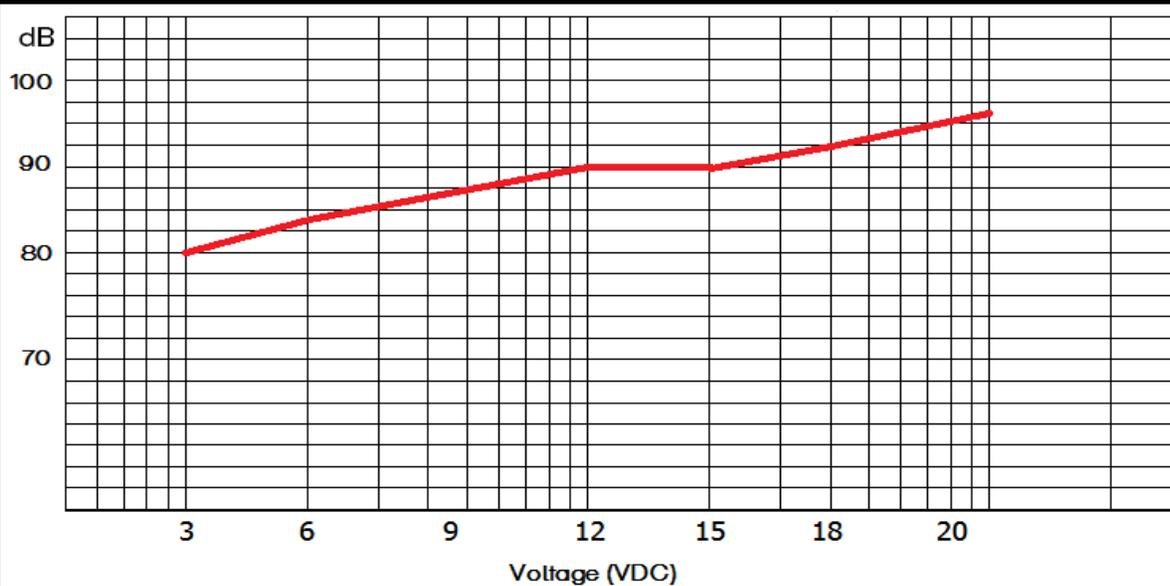


3541 Stop Eight Road • Dayton, Ohio 45414

Product Overview

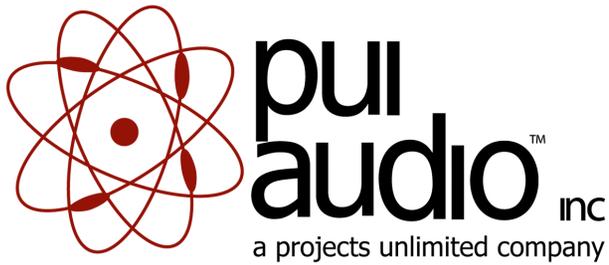
- 23mm diameter, 3-20 VDC self-drive indicator
- 85 dBA minimum output (12 VDC @ 10 cm)
- 3,100 Hz continuous tone for ultimate audibility
- Noryl® housing withstands Wave soldering temperatures
- Removable wash tag preserves performance

SPL vs Voltage (measured @ 10 cm)



RoHS Compliant

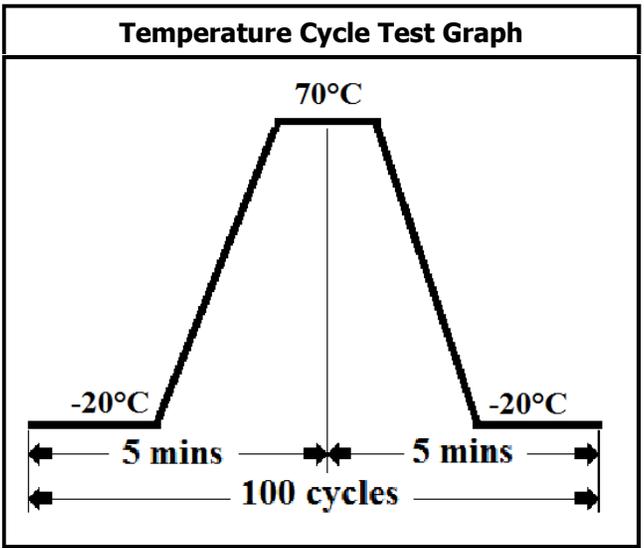
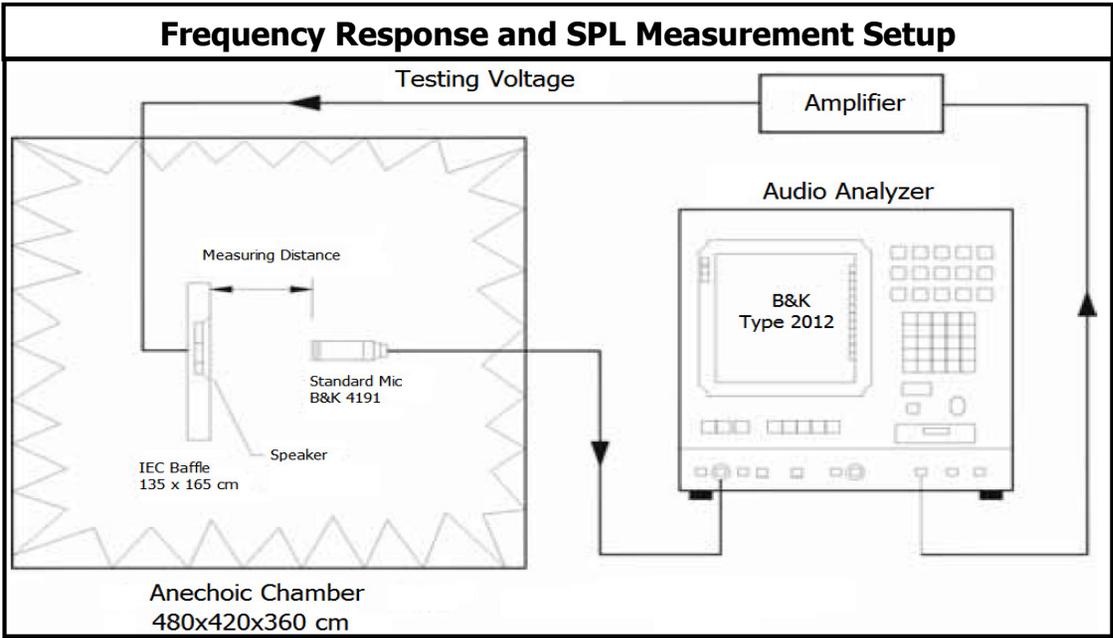
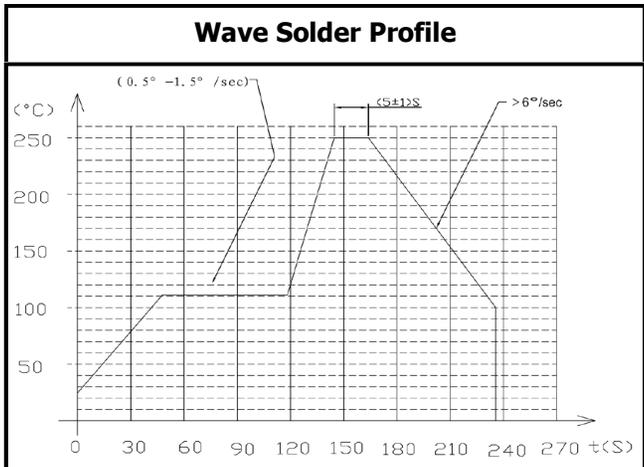




AI-2331-TWT-R 23mm Indicator

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.



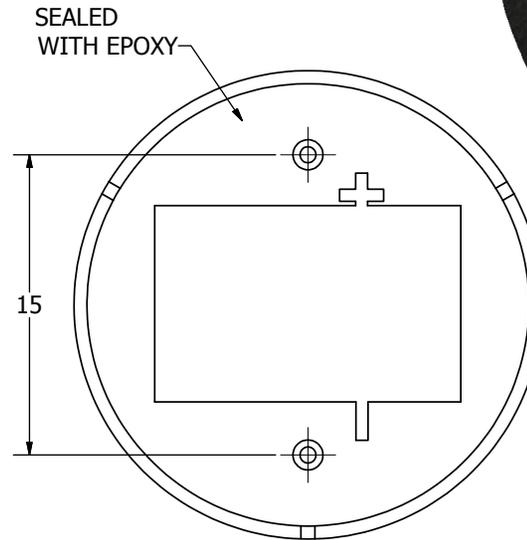
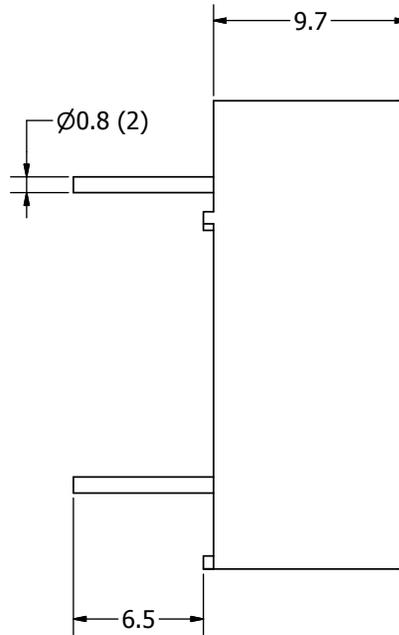
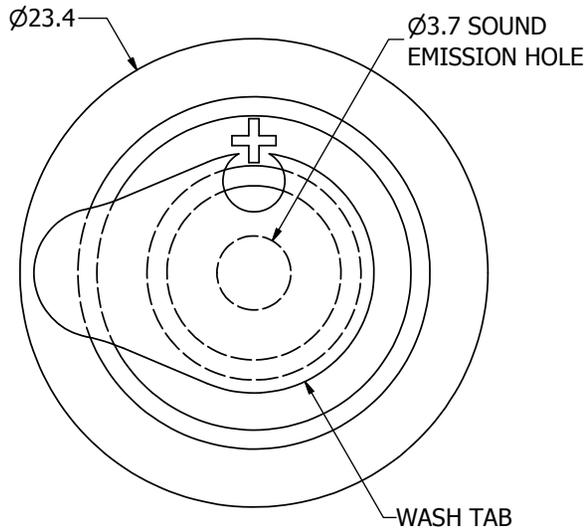
SPECIFICATIONS

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

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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	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
		R.A.C.	8/23/2004			R.W.	8/23/2004	12/21/2008
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				Indicator			Edition	Sheet
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