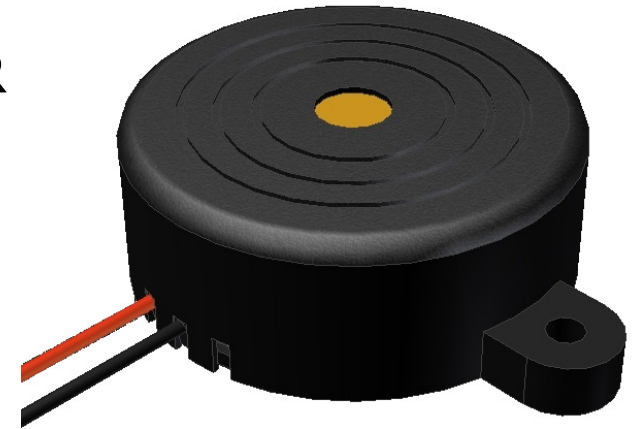


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AI-4228-TF-LW140-4-R 42mm Indicator

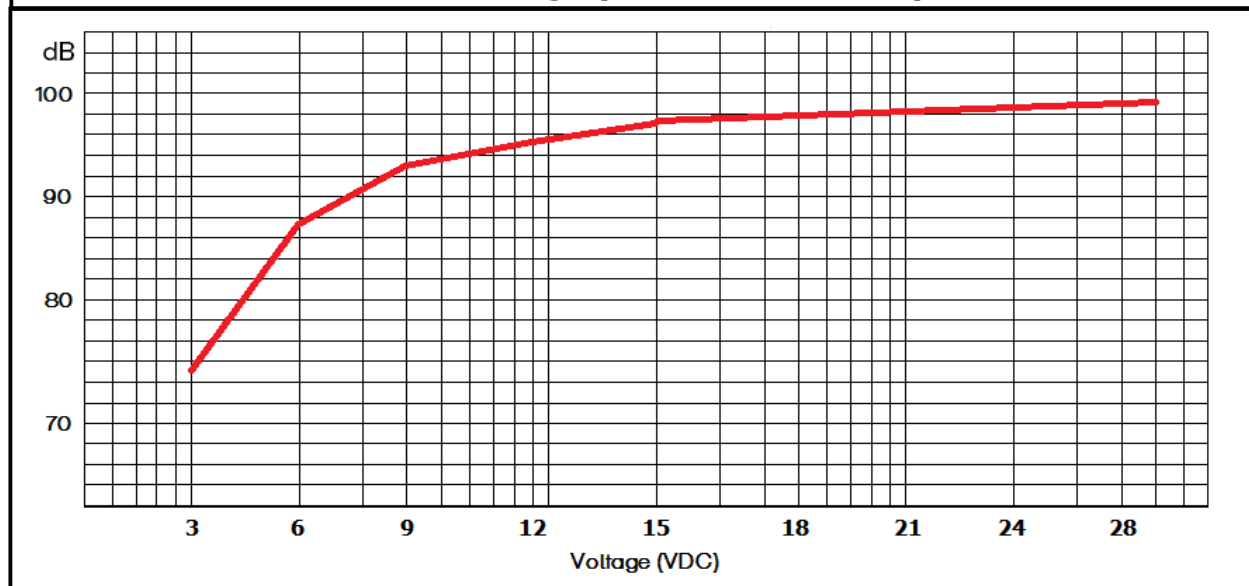


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Product Overview

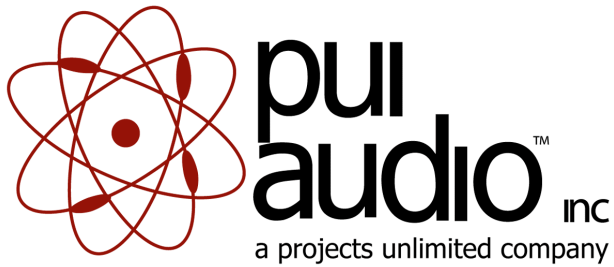
- 42mm diameter, 3-28 VDC self-drive indicator
- High 95 dBA minimum output (12 VDC @ 10 cm) and 2.8 kHz continuous tone
- ABS housing with mounting tabs and 140mm lead wires for quick connection
- Piezo-based solution consumes only 7 mA of current

SPL vs Voltage (measured @ 30 cm)



RoHS Compliant



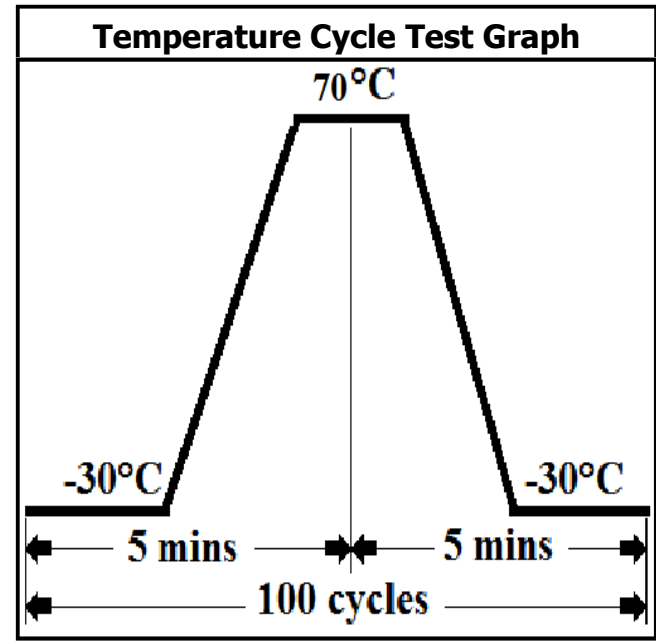
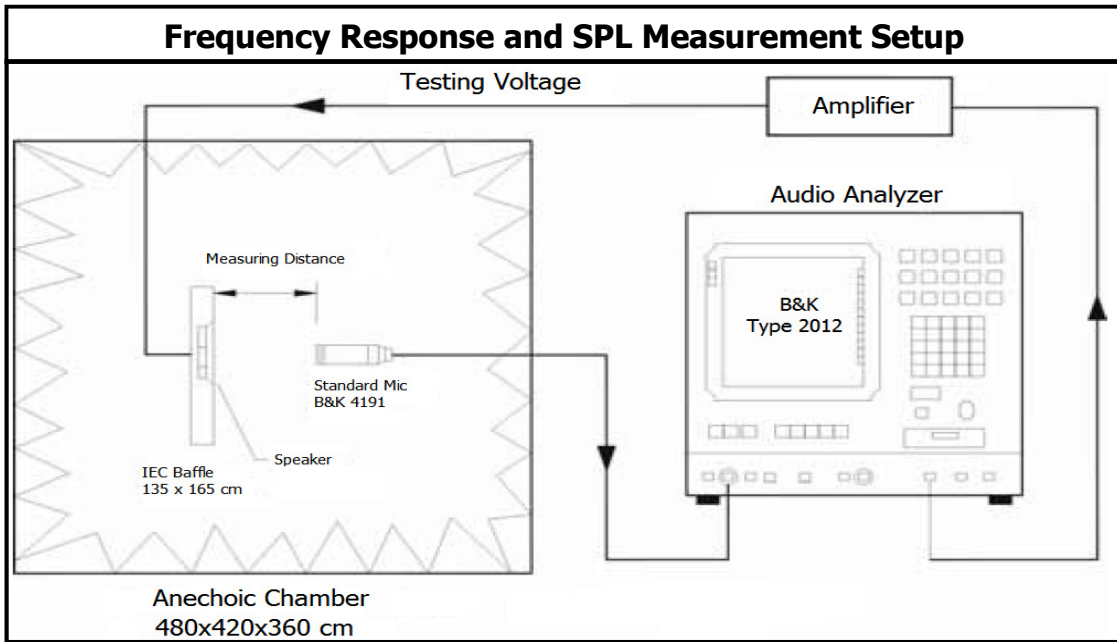


AI-4228-TF-LW140-4-R

42mm Indicator

| 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 | 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 70°C, 100 cycles |

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



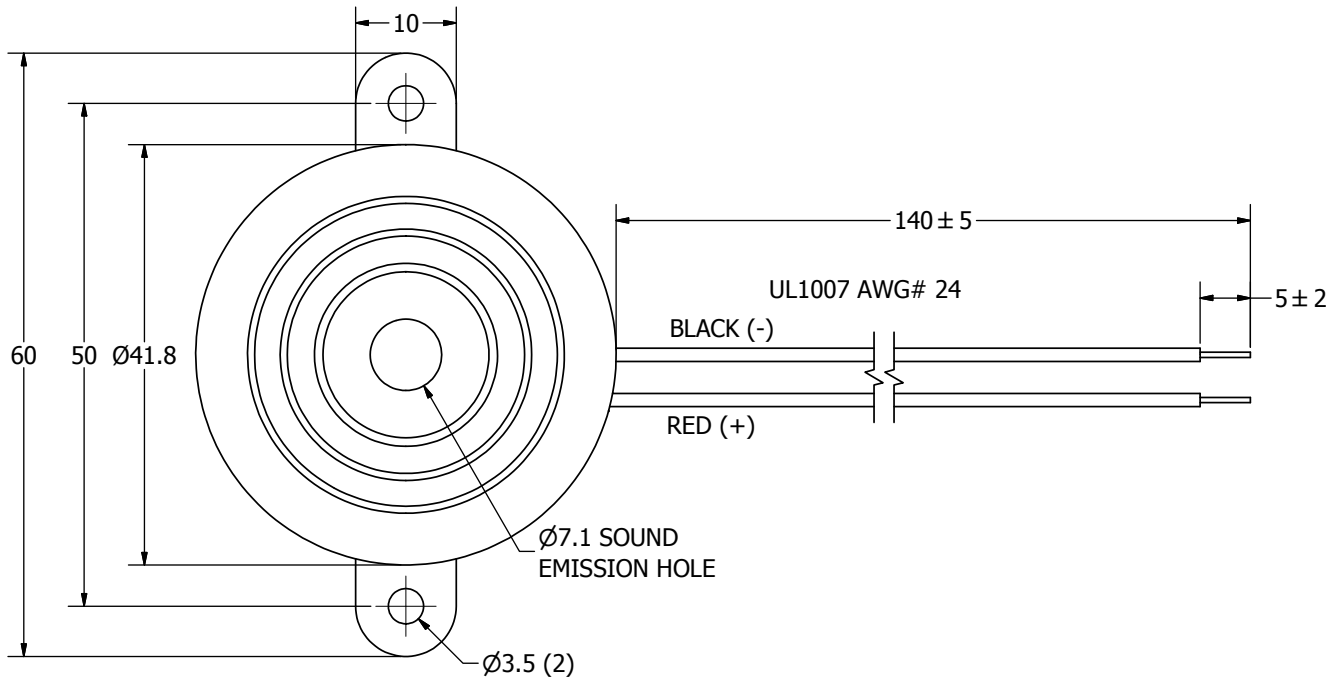
SPECIFICATIONS

| PARAMETERS | VALUES | UNITS |
|-------------------------|-------------|--------------|
| RATED VOLTAGE | 12 | Vdc |
| OPERATING VOLTAGE RANGE | 3 ~ 28 | Vdc |
| RATED CURRENT (MAX) | 7 | mA |
| MINIMUM SPL @ 10 CM | 95 | dBA |
| RESONANT FREQUENCY | 2,800 ± 500 | Hz |
| TONE OR PULSE RATE | CONTINUOUS | 0 pulse /sec |
| OPERATING TEMPERATURE | -20 ~ +60 | °C |
| STORAGE TEMPERATURE | -30 ~ +70 | °C |
| HOUSING MATERIAL | ABS | - |
| TERMINAL MATERIAL | LEAD WIRE | - |
| WEIGHT | 12 | grams |

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REVISION HISTORY

| LTR | DESCRIPTION | DATE | APPROVED |
|-----|--|------------|----------|
| - | RELEASED FROM ENGINEERING | 5/05/2006 | |
| A | REVISED COLOR OF LEAD WIRE | 10/11/2007 | R.W. |
| B | REVISED TO INVENTOR 3-D DRAWING TEMPLATE | 3/03/2008 | 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 A3 | Designed by | Date | Checked by | Date | Approved by | Date | Drawn Date | | |
| | | J.D. | 5/5/2006 | B.R. | 5/5/2006 | E.P. | 5/5/2006 | 3/3/2008 | | |
| AI-4228-TF-LW140-4-R.idw | |  pui audio a projects unlimited company | | AI-4228-TF-LW140-4-R | | | Indicator | | Edition - | Sheet 1 / 1 |