

Data Sheet

AI-1450-T-WP-LW80-R

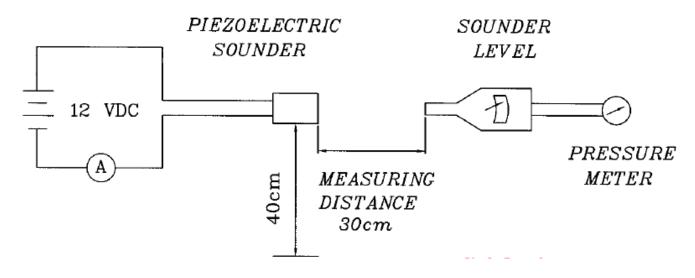
Features

- IP67 Rated Piezo Indicator
- Lead wires for easy installation
- 5,000 Hz Resonant Frequency

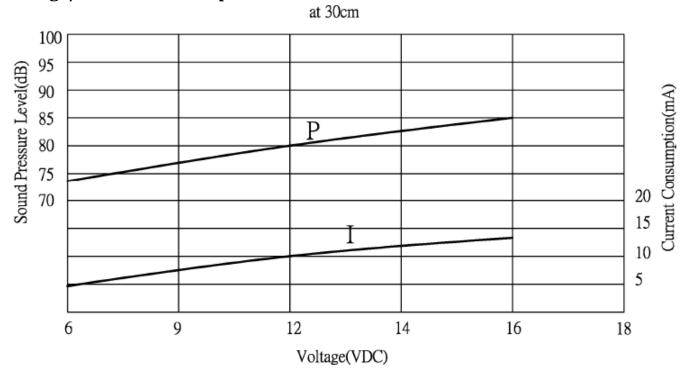
Specifications

| Parameters | Values | Units |
|-------------------------------|-------------------|-------|
| Rated Voltage | 12 | VDC |
| Operating Voltage Range | 9 ~ 16 | VDC |
| Current Draw at Rated Voltage | 35 | mA |
| Minimum SPL @ 30cm | 80 | dBA |
| Resonant Frequency | 5,000 ± 500 | Hz |
| Tone or Pulse Rate | Continuous | - |
| Housing Material | ABS | - |
| Terminal Material | Lead Wire | - |
| Weight | 10 | Grams |
| Acceptable Soldering Methods | Hand Solder | - |
| Environmental Compliances | RoHS | - |
| Storage Temperature | -40 ∼ + 95 | °C |
| Operating Temperature | -30 ∼ +85 | °C |
| IP Rating | IP67 | - |

Measurement Method



Voltage/Current Consumption



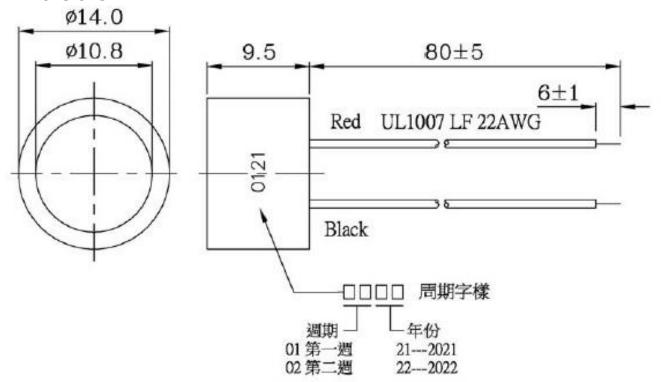
Reliability

| No. | Item | Test Condition | Evaluation standard |
|-----|--|---|--|
| 1 | Solderability 焊錫附著性 (Connector excepted) 端子類不適用此項 | Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5℃ for 3±0.5 seconds. 裸線部份浸入松香溶液 5 秒後,再浸入+270±5℃溶融焊鍋槽 3±0.5 秒. | 90% min. stripped wires shall be wet with solder. (Except the edge of terminal) 浸入裸線部份附著焊錫 90%以上. (未端斷而不算) |
| 2 | Lead Wire Pull Strength 線材拉力 | The pull force shall be applied to double lead wire: Horizontal 3.0N(0.306kg) for 30 seconds. Vertical 2.0N(0.204kg) for 30 seconds. 雙線材水平方向施以3.0N(0.306kg)的力量,垂直方向施以2.0N(0.204kg)的力量,各30秒 | No damage and cutting off. 線材不鬆動,不脫落. |
| 3 | Vibration 振動試驗 | Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. 振動週波數 10~55HZ、全振幅 1.5mm 於 X.Y.Z.3 個方向,各 2 小時. | The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones .The SPL should |
| 4 | Drop test 落下測試 | The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times). 單體從 75 公分高處, X.Y.Z.3 個方向,各 3 回,落於 40mm 厚木板上. | be in ±10dB compared with initial one. 諧振頻率與消耗電流變化量須 ±10%內. 輸出音壓變化量須在 ±10dB內. |

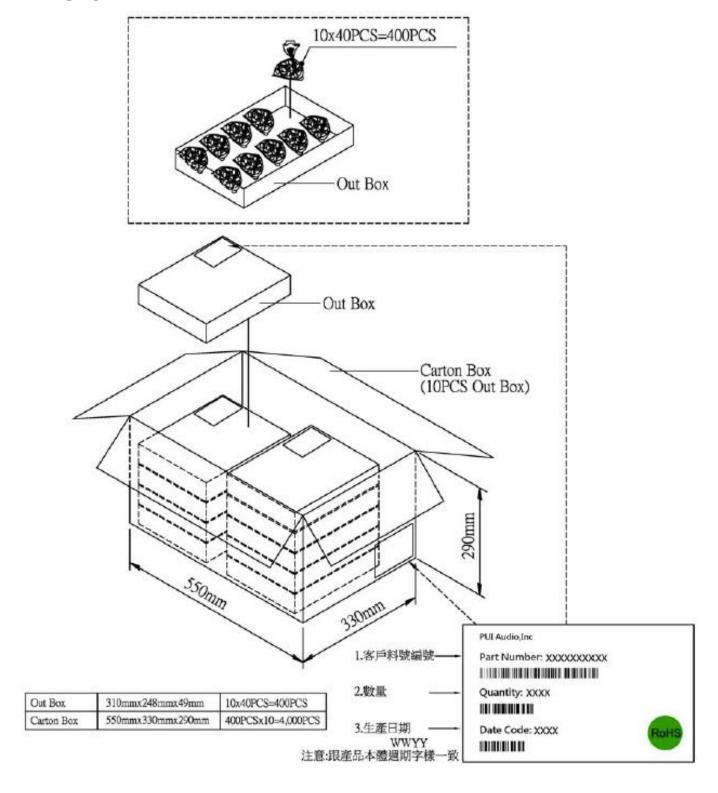
Temp Tests

| No. | Item | Test Condition | Evaluation standard |
|-----|----------------------------|--|---|
| 1 | High temp. test 高溫測試 | After being placed in a chamber at +95°C for 240 hours 置於+95°C環境中 240 小時 | |
| 2 | Low temp. test 低温測試 | After being placed in a chamber at -40°C for 240 hours 置於-40°C環境中 240 小時 | |
| 3 | Humidity test 相對濕度測試 | After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours 置於+40°C, 相對濕度 90±5% 環境中 240 小時 | Being placed for 4 hours at +25°C, buzzer shall be |
| 4 | Temp. cycle test 溫度循環試驗 | The part shall be subjected to 5 cycles. One cycle shall be consist of: 軍體承受溫度循環測試 5 次,其循環內容如圖示: +95°C -40°C 0.5hr 0.5hr 0.25 0.5hr 0.5hr 0.5hr 0.25 3hours | measured. The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones. The SPL should be in ±10dB compared with initial one. 經測試後,靜置於+25℃(室溫)環境中 4 小時後,諧振頻率與消耗電流變化量須在±10%內. 輸出音壓變化量須在±10dB內. |

Dimensions



Packaging



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Specifications Revisions

| Revision | Description | Date |
|----------|---------------------------|----------|
| Α | Released from Engineering | 7/6/2021 |

Note:

- 1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are ± 0.5 mm and angles are $\pm 3^{\circ}$.
- 2. Specifications subject to change or withdrawal without notice.
- 3. This part is ROHS 2015/863/EU compliant (7c-1 piezo devices)