



PUIaudio

Data Sheet

AT-1442-T-WP-LW80-R

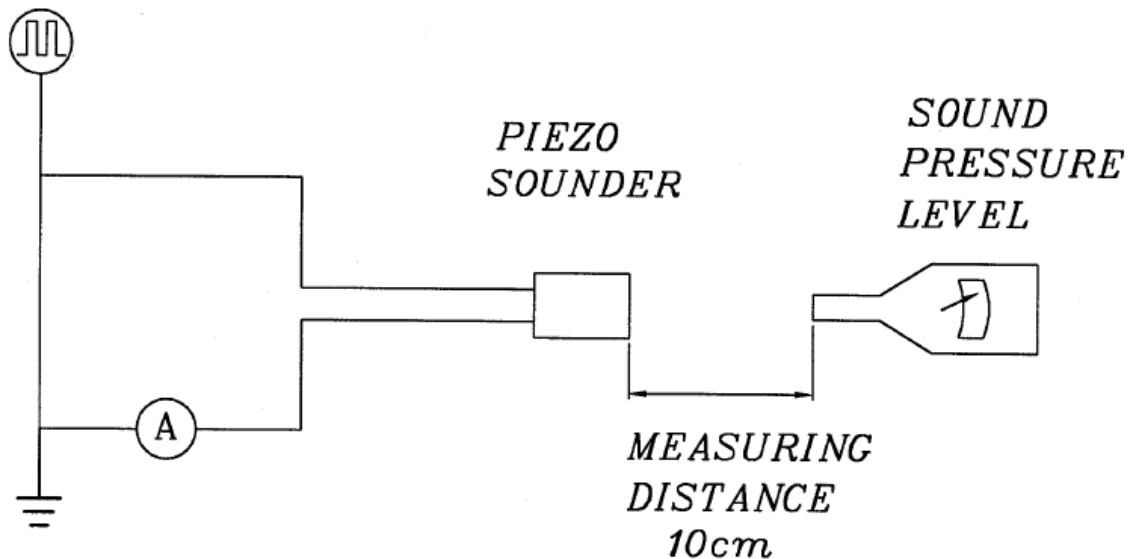
Features

- IP67 Rated Piezo Indicator
- Lead wires for easy installation
- 4,250 Hz Resonant Frequency

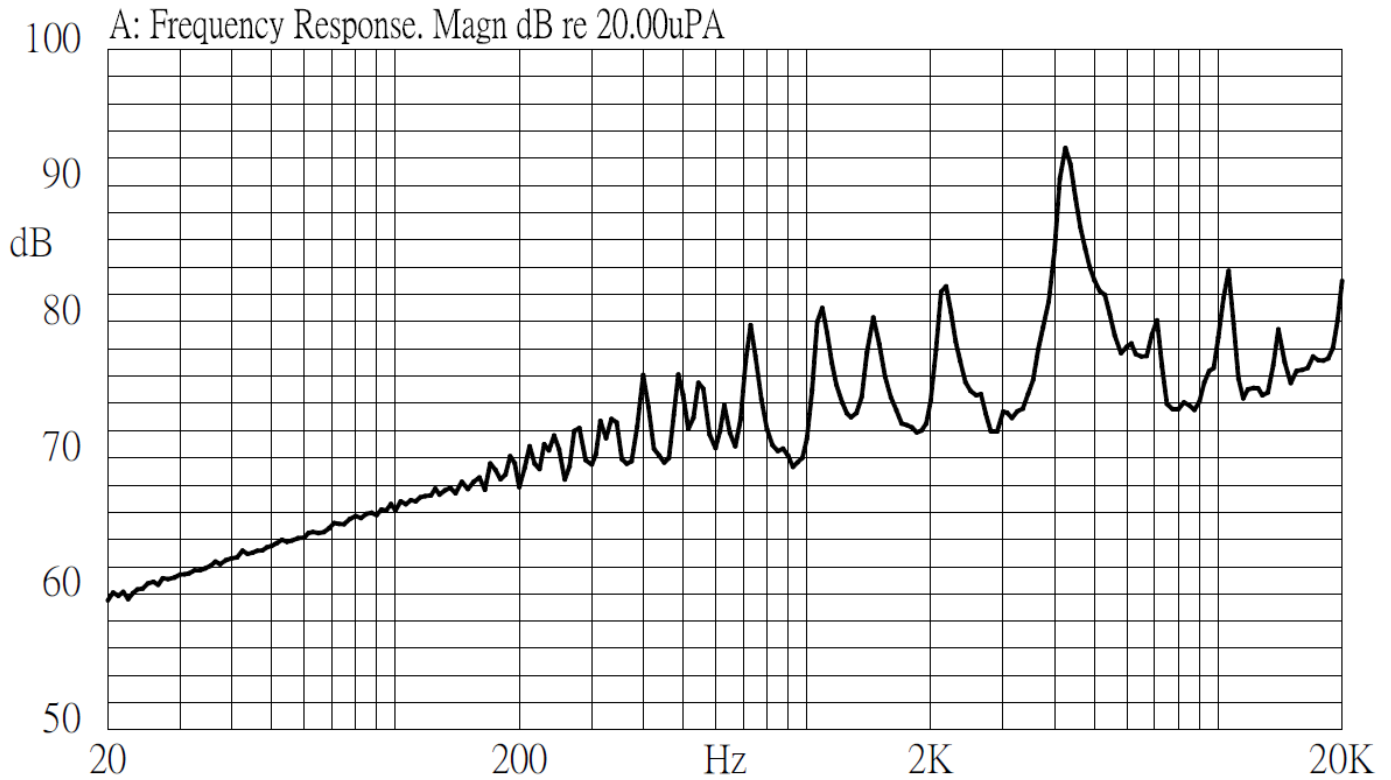
Specifications

| Parameters | Values | Units |
|-------------------------------|-------------|-------|
| Rated Voltage | 10 | Vpp |
| Operating Voltage Range | 30max | Vpp |
| Current Draw at Rated Voltage | 10.1max | mA |
| Capacitance (1kHz/1V) | 20,000±30% | pF |
| Minimum SPL @ 10cm | 84 | dBA |
| Resonant Frequency | 4,250±500 | Hz |
| Housing Material | ABS | - |
| Terminal Material | Lead Wire | - |
| Weight | 2.6 | Grams |
| Environmental Compliances | RoHS, REACH | - |
| Storage Temperature | -30 ~ +85 | °C |
| Operating Temperature | -40 ~ +95 | °C |
| IP Rating | IP67 | |

Measurement Method



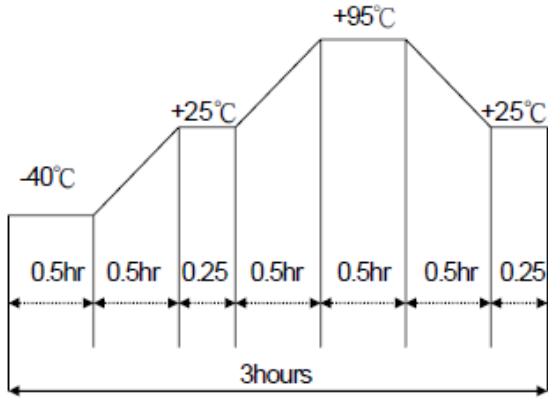
Typical Frequency Response



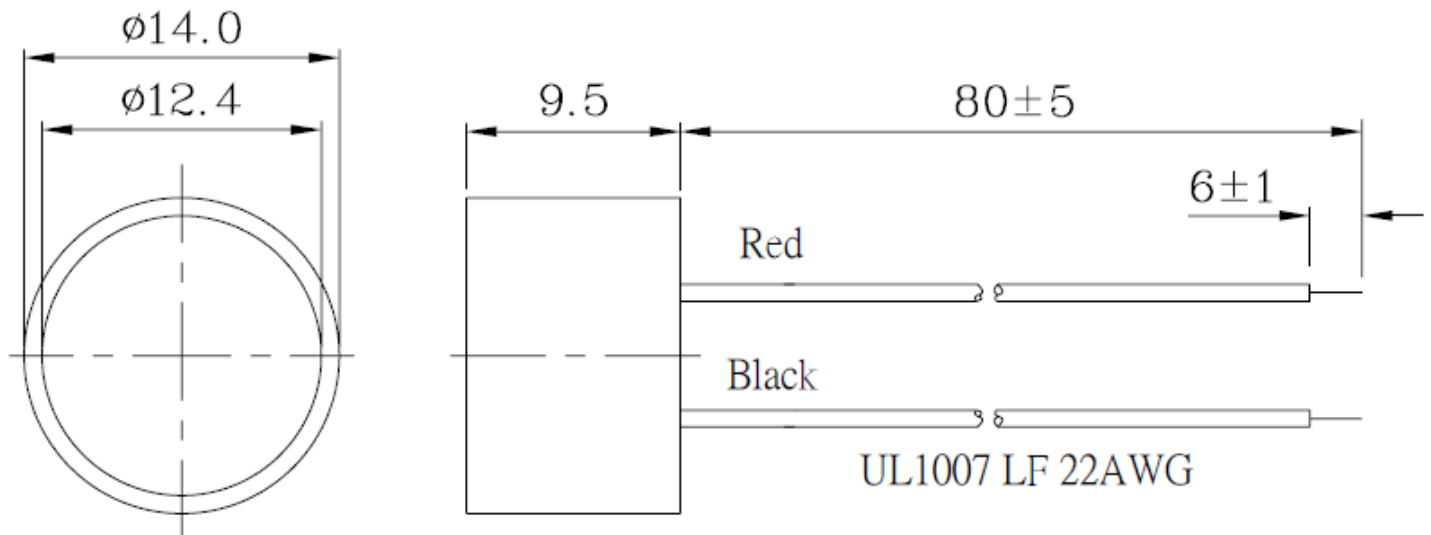
Reliability

| No. | Item | Test Condition | Evaluation standard |
|-----|--|---|---|
| 1 | Solderability 焊錫附着性 (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°C for 3±0.5 seconds. 裸線部份浸入松香溶液 5 秒後,再浸入+270±5°C溶融焊錫槽 3±0.5 秒. | 90% min. stripped wires shall be wet with solder.(Except the edge of terminal) 浸入裸線部份附着焊錫 90%以上.(末端斷面不算) |
| 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 XYZ 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 be in ±10dB compared with initial one. |
| 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,XYZ 3 個方向,各 3 回,落於 40mm 厚木板上. | 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. |

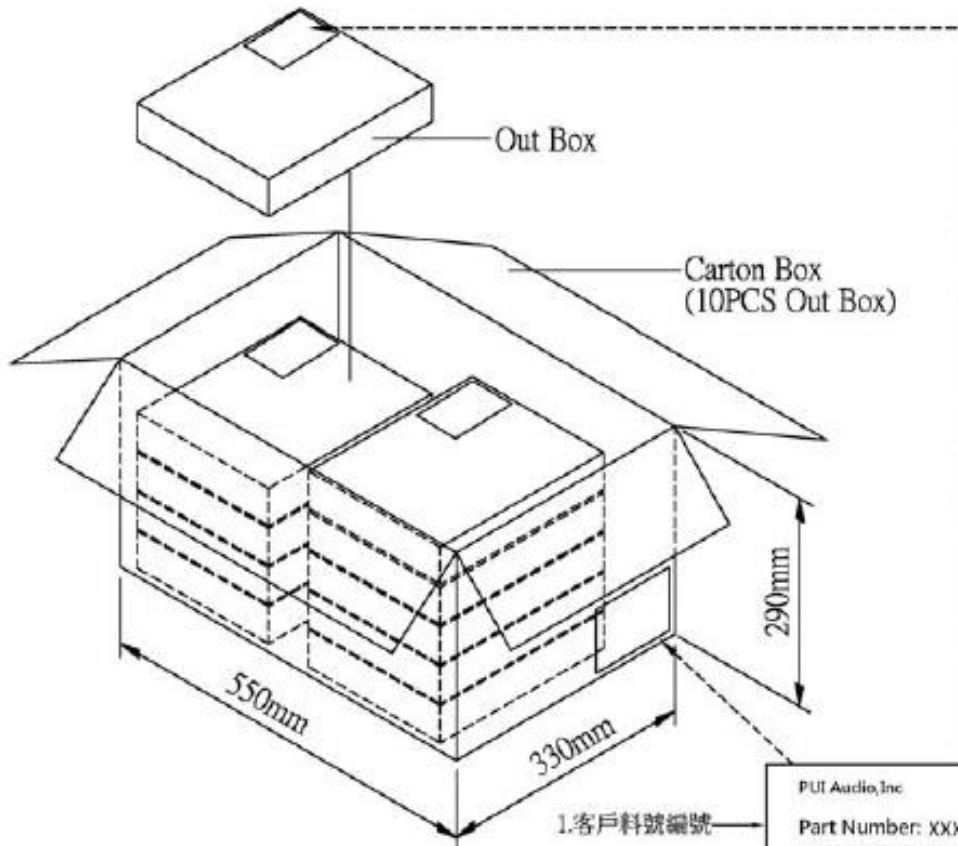
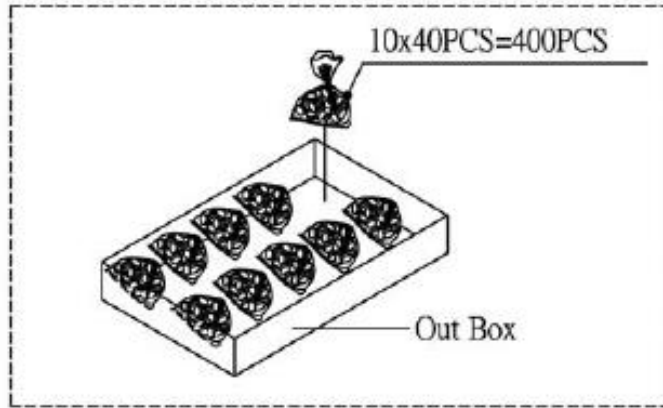
Temp Tests

| 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 | Being placed for 4 hours at +25°C, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in $\pm 10\%$ compared with initial ones. The SPL should be in $\pm 10\text{dB}$ compared with initial one. 經測試後，靜置於+25°C（室溫）環境中 4 小時後，諧振頻率與消耗電流變化量須在 $\pm 10\%$ 內。輸出音壓變化量須在 $\pm 10\text{dB}$ 內。 |
| 2 | Low temp. test 低溫測試 | 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 \pm 5% relative humidity for 240 hours 置於+40°C，相對濕度 90 \pm 5% 環境中 240 小時 | |
| 4 | Temp. cycle test 溫度循環試驗 | The part shall be subjected to 5 cycles. One cycle shall be consist of. 單體承受溫度循環測試 5 次，其循環內容如圖示：  | |

Dimensions



Packaging



| | | |
|------------|-------------------|--------------------|
| Out Box | 310mmx248mmx49mm | 10x40PCS=400PCS |
| Carton Box | 550mmx330mmx290mm | 400PCSx10=4,000PCS |

1. 客戶料號編號
2. 數量
3. 生產日期

WWYY

注意:跟產品本體週期字樣一致

PUI Audio, Inc.

Part Number: XXXXXXXXXXXX

Quantity: XXXX

Date Code: XXXX

Specifications Revisions

| Revision | Description | Date |
|-----------------|---------------------------|-------------|
| A | Released from Engineering | 6/23/2021 |

Note:

1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are $\pm 0.5\text{mm}$ 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)