



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



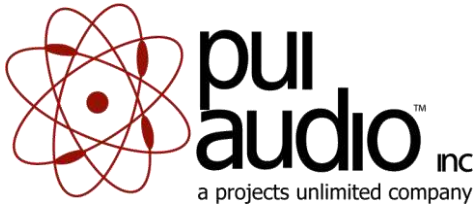
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## Data Sheet

POM-2730L-HD-R

PUI Audio's all-new **HD Series** microphones use premium-grade FETs and diaphragms for high sensitivity and superior signal-to-noise ratio. Each microphone features GSM buzz-blocking capacitors. Upgrade the ECM microphone that you use today with a PUI Audio **HD Series** microphone.

The 6mm diameter **POM-2730L-HD-R** is designed for extreme fidelity from 20 Hz to 20 kHz.

### Features:

- 6mm diameter
- 2.7mm height
- -30 dB sensitivity
- 74 dB signal-to-noise ratio
- True 20 Hz to 20 kHz performance

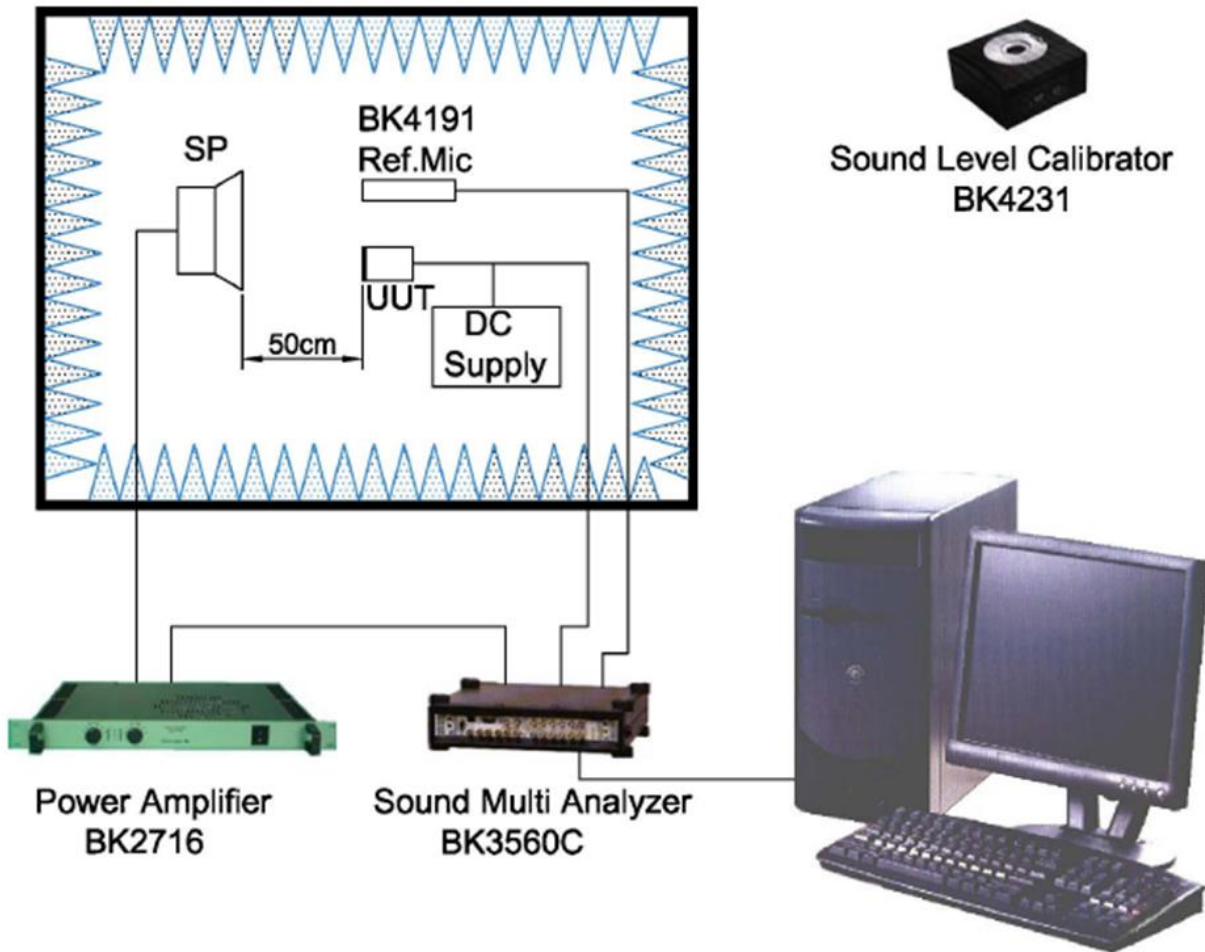
### Specifications

| Parameters   | Values           | Units |
|--|------------------|-------|
| Sensitivity (1 kHz @ 50cm)<br>0 dB=1V/Pa                 | -30 ±3           | dB    |
| Rated Voltage  | 3                | VDC   |
| Output Impedance (@ 1 kHz)                               | 2.2              | kΩ    |
| Current consumption<br>(3VS with 2.2 kΩ RL)              | 500              | μA    |
| Signal-to-Noise Ratio<br>(1kHz, 94 dB input, A-weighted) | 74               | dB    |
| Decreasing Voltage (3VS to 2VS)                          | -3               | dB    |
| Frequency Range  | 20 ~ 20,000      | Hz    |
| Operating Voltage Range                                  | 1 ~ 10           | VDC   |
| Maximum SPL Input (THD<3%)                               | 110              | dB    |
| Directivity  | Omni-directional | -     |

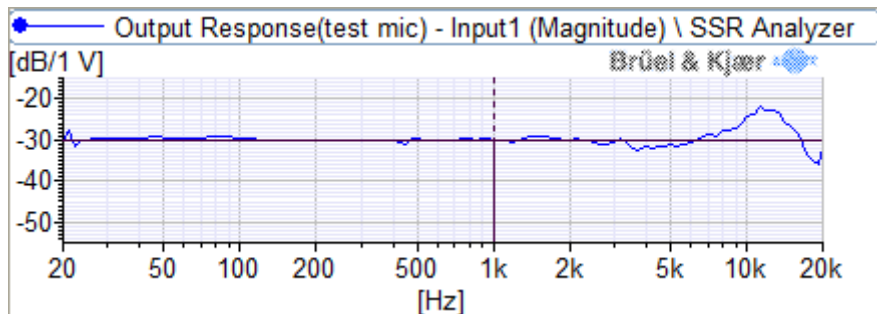
## Specifications (continued)

|                       |           |       |
|-----------------------|-----------|-------|
| Operating Temperature | -20 ~ +70 | °C    |
| Storage Temperature   | -40 ~ +85 | °C    |
| Weight                | <0.3      | Grams |

## Measurement Method (in Anechoic Chamber)



## Typical Frequency Response (measured at 50cm with 3V input and 94 dB source)

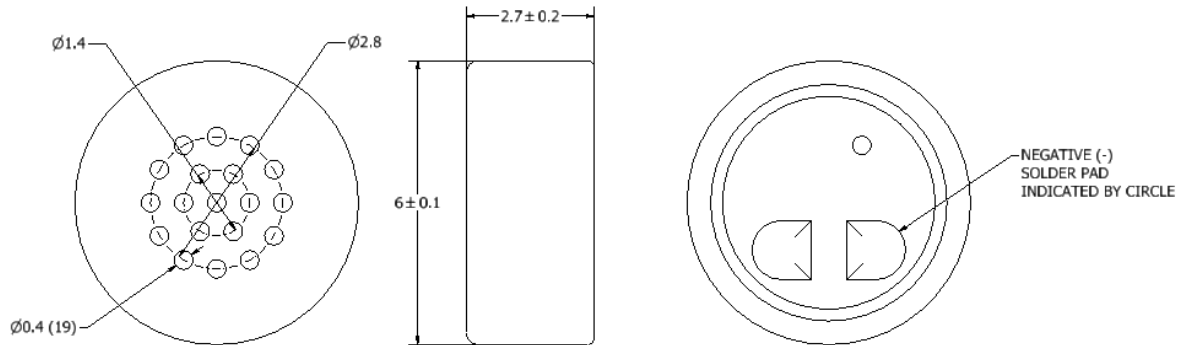


## Reliability Testing

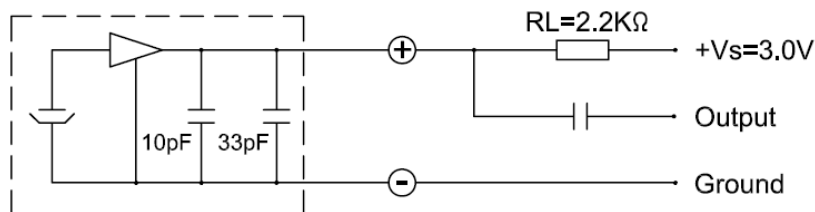
| Type of Test                     | Test Specifications  |
|----------------------------------|--|
| High Temperature Test            | 200 hours at +70°C ± 3°C followed by two hours in normal room temperature  |
| Low Temperature Test             | 200 hours at -25°C ± 3°C followed by two hours in normal room temperature  |
| Humidity Test                    | 200 hours at +40°C ± 3°C with relative humidity at 90% to 95% followed by 2 hours in normal room temperature   |
| Temperature Cycle Testing        | 30 minutes at -25°C, 10 minutes at 20°C, 30 minutes at +70°C, 10 minutes at 20°C for five cycles, followed by 2 hours in normal room temperature   |
| Vibration Test                   | 10 to 55 Hz for 1 minute with 1.52mm distance, followed by a two hour 3 axis test in packaging   |
| Drop Test                        | Drop microphones in packaging onto concrete floor from 1 meter height in each of 3 axis  |
| ESD Test (according to IEC 6100) | <ol style="list-style-type: none"> <li>Contact discharge - Discharge 6000 VDC from capacitor into microphone output through 330Ω resistor ten times.</li> <li>Air discharge - Discharge 8000 VDC into sound hole of the microphone ten times.</li> </ol> |

After each test, the speaker's SPL shall be ±3 dB of the original SPL

## Dimensions



## Recommended Drive Circuit



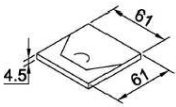
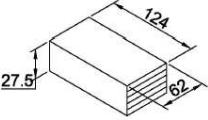
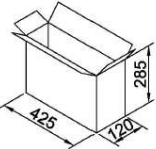
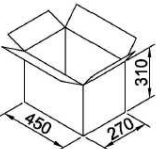
## Microphone Handling Precautions

High temperature and/or static electricity may damage microphones. To ensure careful handling, we suggest following these precautions:

- Ensure the power rating of the soldering iron is below 90 watts
- The temperature of the soldering iron must be limited to 360°C ±10°C (680°F ±50°F)
- Soldering duration for each terminal shall be at or under 2 seconds
- If practical, use a metal fixture to hold the microphone in-place and to act as a heatsink. A fixture should have appropriate diameter holes drilled through the entire fixture to prevent pressure from being placed on the diaphragm (as below)



## Packaging

|                | Drawing   | Qty (pcs.)          | Size(mm)<br>L×W×H | Material  |
|----------------|---|---------------------|-------------------|-----------|
| Packing        |  | 100                 | 61×61×4.5         | Polythene |
| Inner Package  |  | 1000<br>(10×100)    | 124×62×27.5       | Paper     |
| Middle Package |  | 50000<br>(50×1000)  | 425×120×285       | Paper     |
| Outer Package  |  | 100000<br>(2×50000) | 450×270×310       | Paper     |

**Specifications Revisions**

| <b>Revision</b> | <b>Description</b>          | <b>Date</b> |
|-----------------|-----------------------------|-------------|
| -               | Released from Engineering   | 6/6/2017    |
| A               | Revised Microphone Polarity | 2/20/2018   |

**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 2011/65/EU Compliant.