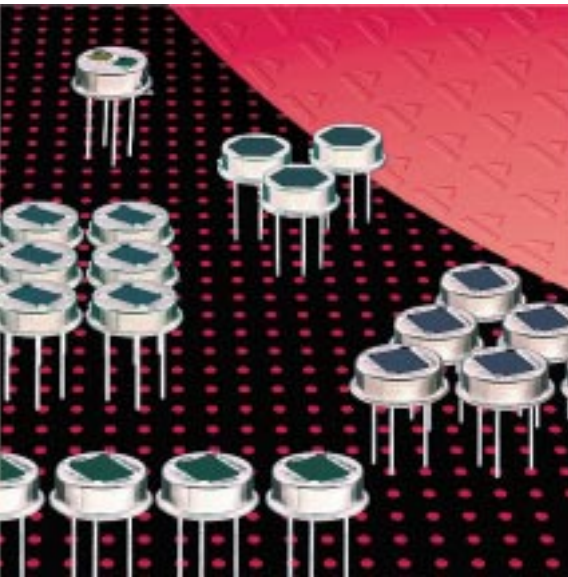


# Twin Element Detector LHi 1548



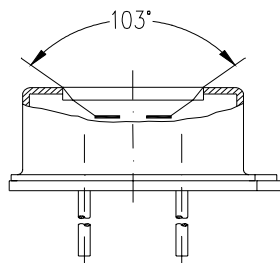
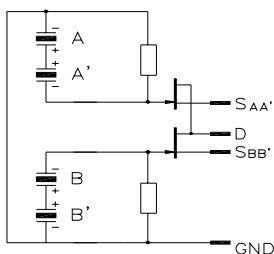
**Four elements as two pairs**

**Two outputs, inverse polarity**

**Designed for PIR Alarm Systems**

The **LHi 1548** pyroelectric infrared detector is designed for high end PIR alarm applications. It includes a twin type pyroelectric ceramic with 4 sensitive elements connected to two FET source follower circuits. Thus it provides for dual channel output. The channels are of inverse polarity.

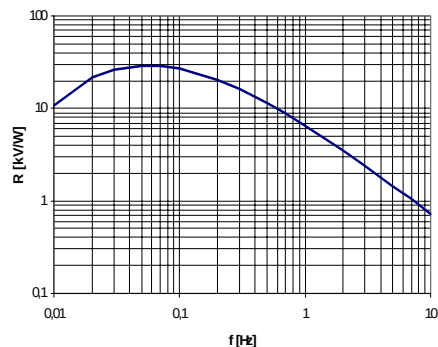
The **LHi 1548** detector is available in **TO-5** housing with standard infrared filter. It offers excellent common mode performance (match) and low noise



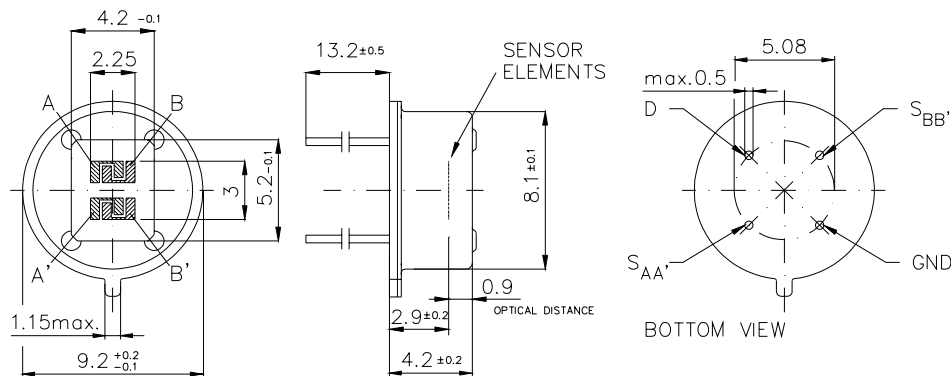
Field of view

| Parameters                       | LHi 1548             |                       |                      |                 |                            |
|----------------------------------|----------------------|-----------------------|----------------------|-----------------|----------------------------|
|                                  | min                  | typical               | max                  | units           | condition                  |
| <b>Element size</b>              |                      | 0,953                 |                      | mm <sup>2</sup> | (4 elements)               |
| <b>Responsivity</b>              | 4200                 | 5000                  |                      | V/W             | 100°C, 1 Hz                |
| <b>Match</b>                     |                      | 1                     | 15                   | %               |                            |
| <b>Noise</b>                     |                      | 30                    | 75                   | μVpp            | 25°C, 0,3...10Hz           |
| <b>Offset Voltage</b>            | 0,2                  |                       | 1,55                 | V               | R <sub>s</sub> =47kΩ, 25°C |
| <b>NEP</b>                       |                      | 8,6x10 <sup>-10</sup> | 28x10 <sup>-10</sup> | W √Hz           | 1Hz Bw, 100°C, 1 Hz        |
| <b>D*</b>                        | 3,5x10 <sup>-7</sup> | 11x10 <sup>-7</sup>   |                      | cm √Hz/W        | 1Hz Bw, 100°C, 1 Hz        |
| <b>Output Impedance</b>          |                      | 5                     | 10                   | kΩ              | R <sub>s</sub> =47kΩ, 25°C |
| <b>Operating Voltage</b>         | 2                    |                       | 15                   | V               | R <sub>s</sub> =47kΩ, 25°C |
| <b>Field of View, horizontal</b> |                      | 103°                  |                      |                 | unobstructed               |
| <b>vertical</b>                  |                      | 96°                   |                      |                 | unobstructed               |
| <b>Operating Temp.</b>           | -40                  |                       | 85                   | °C              | non permanent              |
| <b>Storage Temperature</b>       | -40                  |                       | 85                   | °C              | non permanent              |

Right for modification reserved / WS / 29.6.2001



Frequency Response



Dimensions in mm

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