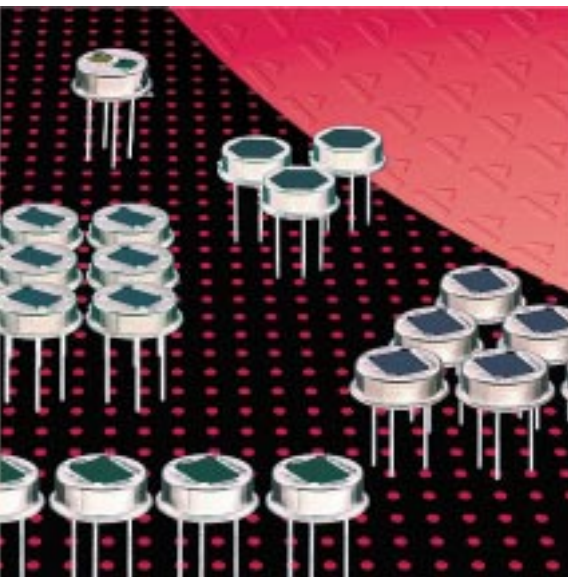


# Dual Element Detector LHi 968



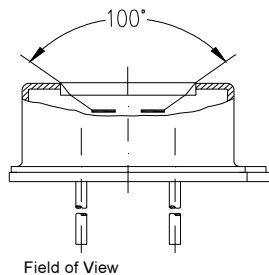
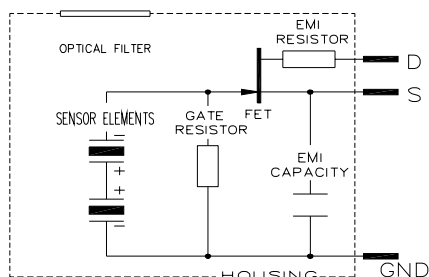
## High End Dual Element Detector

## Special RFI Protection

## Designed for PIR Alarms

The **LHi 968** pyroelectric infrared-detector series is specially designed for Intrusion Alarm applications. It includes a dual element pyroelectric ceramic with FET in source follower connection and RF protection by a resistor and additional capacitor.

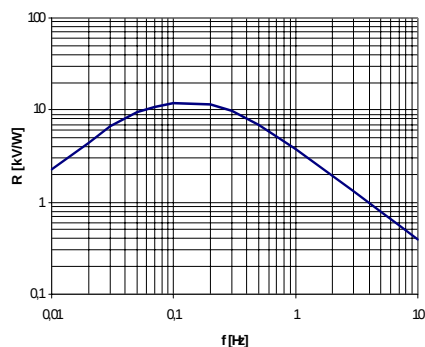
This detector is available in **TO-5** housing with an infrared filter which protects the elements from strong white light disturbance. It offers high responsivity with excellent common mode performance (match) and low noise.



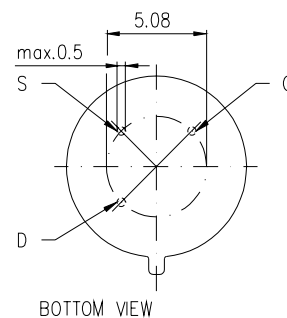
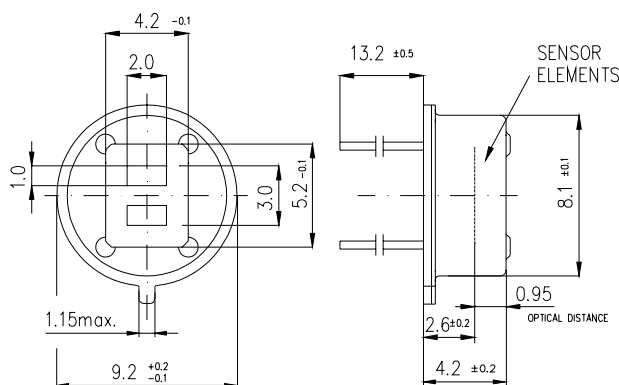
| Parameters            | LHi 968 |         |     |                 |                            |
|-----------------------|---------|---------|-----|-----------------|----------------------------|
|                       | min     | typical | max | units           | condition                  |
| <b>Element size</b>   |         | 2 x 1   |     | mm <sup>2</sup> | (2 elements)               |
| <b>Responsivity</b>   | 3 300   | 3800    |     | V/W             | 100°C, 1 Hz                |
| <b>Match</b>          |         | 1       | 10  | %               |                            |
| <b>Noise</b>          |         | 20      | 50  | µVpp            | 25°C, 0,3...10Hz           |
| <b>Offset Voltage</b> | 0,2     |         | 1,5 | V               | 25°C, R <sub>s</sub> =47kΩ |

|                                  |                    |                       |                      |          |                            |
|----------------------------------|--------------------|-----------------------|----------------------|----------|----------------------------|
| <b>NEP</b>                       |                    | 7,5x10 <sup>-10</sup> | 28x10 <sup>-10</sup> | W √Hz    | 1Hz Bw, 100°C, 1 Hz        |
| <b>D*</b>                        | 5x10 <sup>-7</sup> | 19x10 <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> |                    | 100°                  |                      |          | unobstructed               |
| <b>vertical</b>                  |                    | 100°                  |                      |          | unobstructed               |
| <b>Operating Temperature</b>     | -40                |                       | 85                   | °C       | non permanent              |
| <b>Storage Temperature</b>       | -40                |                       | 85                   | °C       | non permanent              |

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