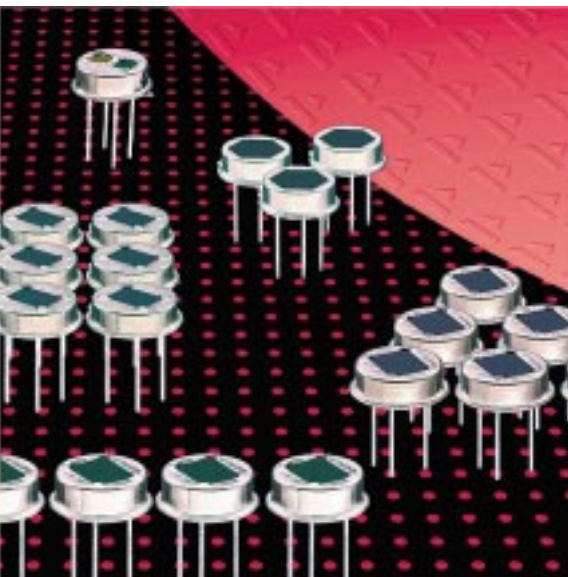


# Dual Element Detector LHi 906



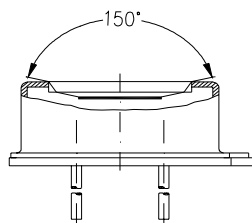
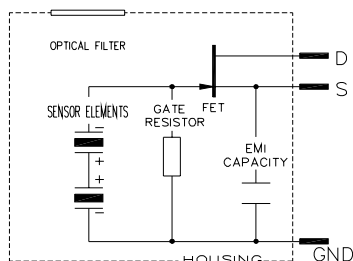
## Banana (Yin Yang) element design

## Single FET output

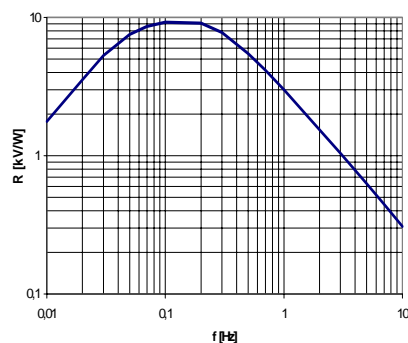
## Designed for ceiling mount applications

The **LHi 906** pyroelectric infrared-detector is a special design for motion control in ceiling mount applications. It includes a pyroelectric ceramic with 2 sensitive elements in round shape connected to one FET in source follower connection.

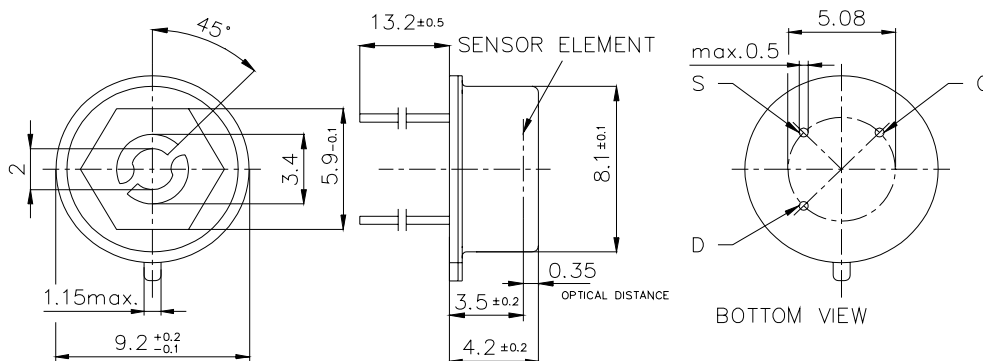
This detector is available in TO-5 housing with a standard infrared filter. It offers low noise, special field of view and capture for ceiling mount applications.



Field of View



Frequency Response



Dimensions in mm

| Parameters                       | LHi 906           |                       |                      | units           | condition                  |
|----------------------------------|-------------------|-----------------------|----------------------|-----------------|----------------------------|
|                                  | min               | typical               | max                  |                 |                            |
| <b>Element size</b>              | 2,66              |                       |                      | mm <sup>2</sup> | (2 round elemts.)          |
| <b>Responsivity</b>              | 2500              | 3000                  |                      | 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               | R <sub>s</sub> =47kΩ, 25°C |
| <b>NEP</b>                       |                   | 7,5x10 <sup>-10</sup> | 23x10 <sup>-10</sup> | W √Hz           | 1Hz Bw, 100°C, 1 Hz        |
| <b>D*</b>                        | 6x10 <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> |                   | 150°                  |                      |                 | unobstructed               |
| <b>Field of View, vertical</b>   |                   | 150°                  |                      |                 | unobstructed               |
| <b>Operating Temp.</b>           | -40               |                       | 85                   | °C              | non permanent              |
| <b>Storage Temperature</b>       | -40               |                       | 85                   | °C              | non permanent              |