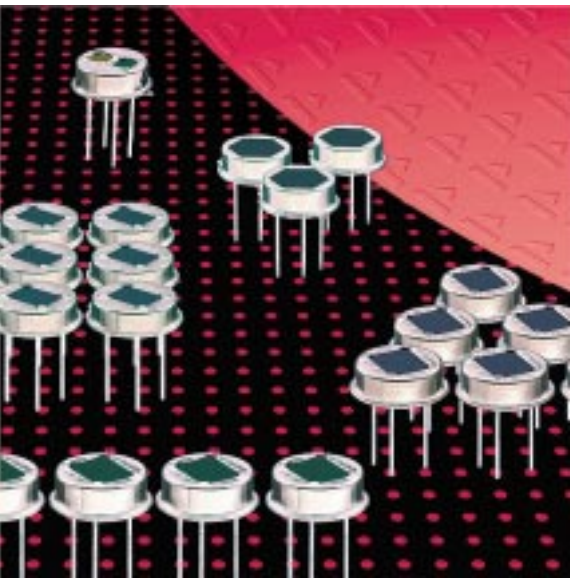
Pyroelectric Infrared Detectors

# Dual Element Detector LHi 906

DATASHEET



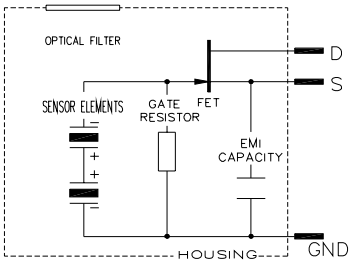
**Banana (Yin Yang) element design**

**Single FET output**

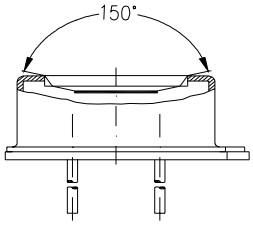
**Designed for ceiling mount applications**

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.

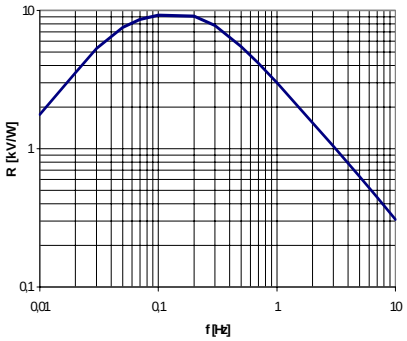



| Parameters | LHi 906 | | | | |
|---|---|---|---|---|---|
| | min | typical | max | units | condition |
| Element size | | 2,66 | | mm² | (2 round elemts.) |
| Responsivity $R_S$ | 2500 | 3000 | | V/W | 100°C, 1 Hz |
| Match | | 1 | 10 | % | |
| Noise | | 20 | 50 | µVpp | 25°C, 0,3...10Hz |
| | | | | | |
| Offset Voltage | 0,2 | | 1,5 | V | $R_S$ =47kΩ, 25°C |
| NEP | | $7{,}5 \times 10^{-10}$ | $23 \times 10^{-10}$ | W √Hz | 1Hz Bw, 100°C, 1 Hz |
| D* | $6 \times 10^{7}$ | $19 \times 10^{7}$ | | cm √Hz/W | 1Hz Bw, 100°C, 1 Hz |
| Output Impedance | | 5 | 10 | kΩ | $R_S$ =47kΩ, 25°C |
| Operating Voltage | 2 | | 15 | V | $R_S$ =47kΩ, 25°C |
| Field of View, horizontal | | 150° | | | unobstructed |
| vertical | | 150° | | | unobstructed |
| Operating Temp. | -40 | | 85 | °C | non permanent |
| Storage Temperature | -40 | | 85 | °C | non permanent |

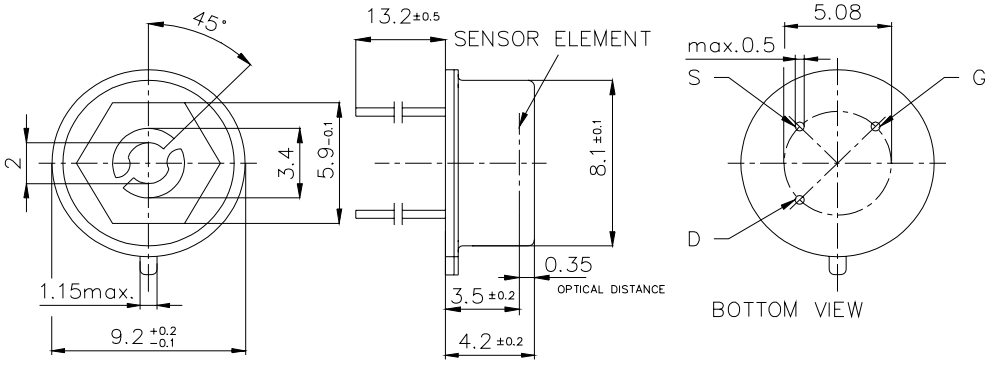



Field of View

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Frequency Response




Dimensions in mm

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