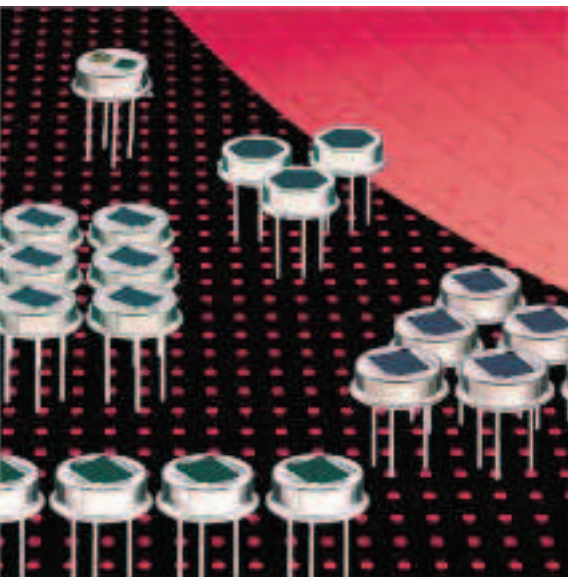


## Dual Element Detector

## LHi 778



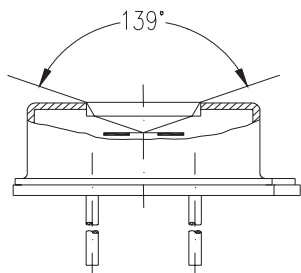
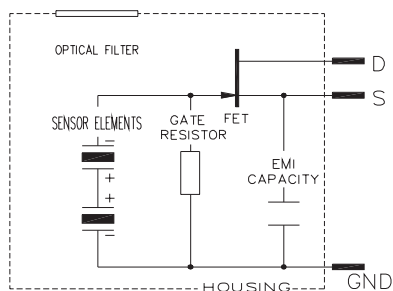
TO-5 housing

Competitive cost version

Designed for motion control

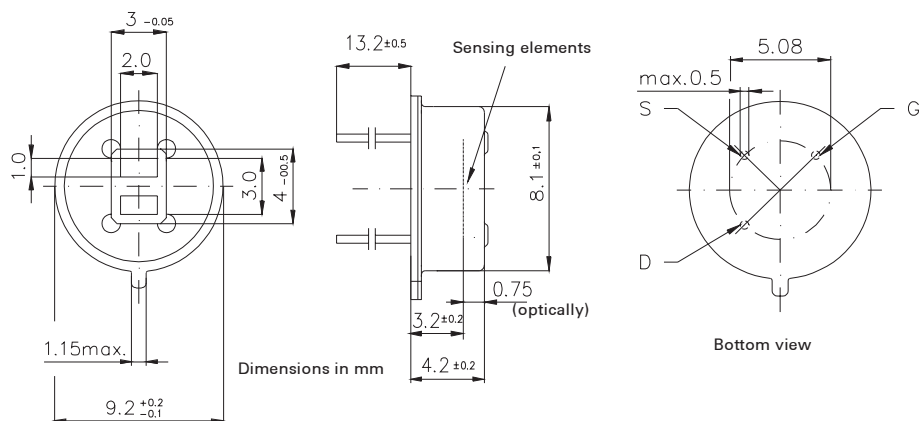
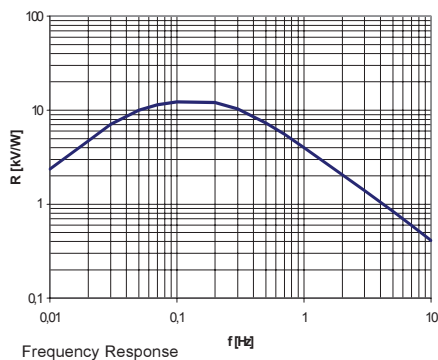
The **LHi 778** pyroelectric infrared-detector series are the standard dual element design recommended for all variants of motion control. They include a dual element pyro-electric ceramic element with Fet in source follower connection.

**LHi 778** detector is available in **TO-5** housing with standard infrared filter. It provides high responsivity with excellent common mode performance (match) and low noise at steady state and temperature changes.



| LHi 778               |                    |                       |                      |                 |                            |
|-----------------------|--------------------|-----------------------|----------------------|-----------------|----------------------------|
| Parameters            | min                | typical               | max                  | units           | condition                  |
| Element size          |                    | 2x1                   |                      | mm <sup>2</sup> | 2 elements                 |
| Responsivity          | 3 300              | 4000                  |                      | V/W             | 100°C, 1 Hz                |
| Match                 |                    | 1                     | 10                   | %               |                            |
| Noise                 |                    | 20                    | 50                   | μVpp            | 25°C, 0,3...10Hz           |
| Offset Voltage        | 0,2                |                       | 1,55                 | V               | R <sub>s</sub> =47kΩ, 25°C |
| NEP                   |                    | 7,5x10 <sup>-10</sup> | 28x10 <sup>-10</sup> | W √Hz           | 1Hz Bw, 100°C, 1 Hz        |
| D*                    | 5x10 <sup>-7</sup> | 19x10 <sup>-7</sup>   |                      | cm √Hz/W        | 1Hz Bw, 100°C, 1 Hz        |
| Output Impedance      |                    | 5                     | 10                   | kΩ              | 47kΩ Load Res.             |
| Operating Voltage     | 2                  |                       | 15                   | V               | R <sub>s</sub> =47kΩ, 25°C |
| Operating Temperature | -40                |                       | 85                   | °C              | non permanent              |
| Storage Temperature   | -40                |                       | 85                   | °C              | non permanent              |

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