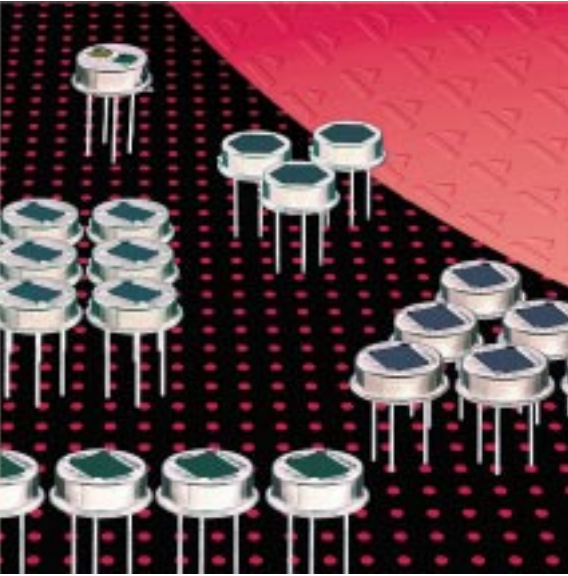


Pyroelectric Infrared Detectors

Dual Element Detector

LHi 778



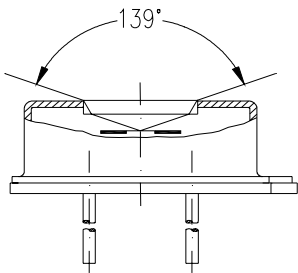
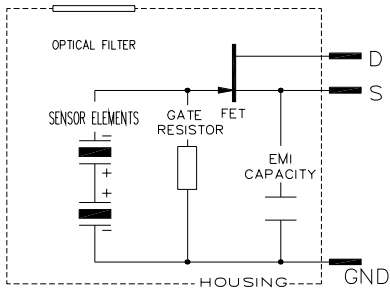
TO-5 housing

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.



| Parameters | | LHi 778 | | | |
|------------------------------|-------------------|-----------------------|----------------------|-----------------|----------------------------|
| | min | typical | max | units | condition |
| Element size | | 2x1 | | mm ² | 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 _s =47kΩ, 25°C |
| NEP | | 7,5x10 ⁻¹⁰ | 28x10 ⁻¹⁰ | W √Hz | 1Hz Bw, 100°C, 1 Hz |
| D* | 5x10 ⁷ | 19x10 ⁷ | | cm √Hz/W | 1Hz Bw, 100°C, 1 Hz |
| Output Impedance | | 5 | 10 | kΩ | 47kΩ Load Res. |
| Operating Voltage | 2 | | 15 | V | R _s =47kΩ, 25°C |
| Operating Temperature | -40 | | 85 | °C | non permanent |
| Storage Temperature | -40 | | 85 | °C | non permanent |

