



Thermopile Comparison: Thin-Film vs. Silicon based

Benefits: Thin-Film Based Thermopile Detectors

- Higher Output and Signal-to-Noise Ratio, the Highest in the industry
- Lower Resistance
- Lower Noise
- Larger Active Area Available
- Greater Flexibility in Responsivity and Time Constant by selecting encapsulation gas. See Application Brief 7, "Effects of Encapsulation Gas on Thermopile Detectors"
- Proven Technology – In Production Since 1977

Benefits: Silicon Based Thermopile Detectors

- Lower Temperature Coefficient of Responsivity
- Lower Cost (STxxx series)
- Smaller Active Areas
- Faster Time Constant
- Response Linear for Higher Incident Power Levels (STxxx series)
- Smaller Packages available
- Customizable Multi-Channel Configurations (STxxx series)
- Adjustable Responsivity and Time Constant by selecting encapsulation Gas
- Proven Technology – In Production Since 1990