

Thermopile Array

Temperature Sensing and Presence Detection



TPiA 4.4T 4146 L3.9 Spatial Array

Target Applications

- Non-Contact Temperature Measurement
- Smart Home Applications
- Presence Detection

Features and Benefits

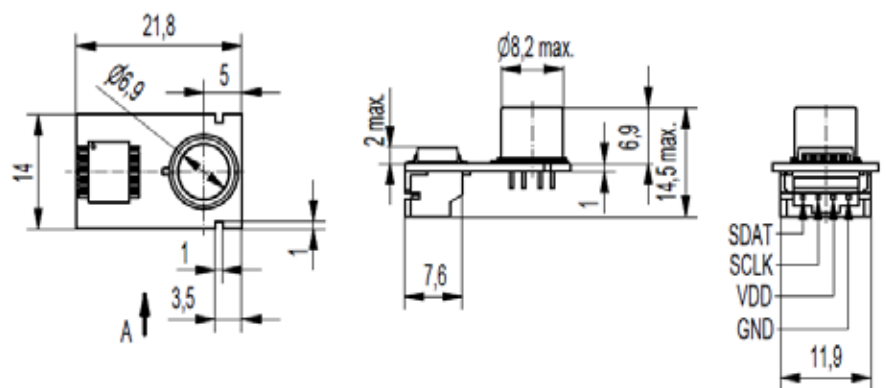
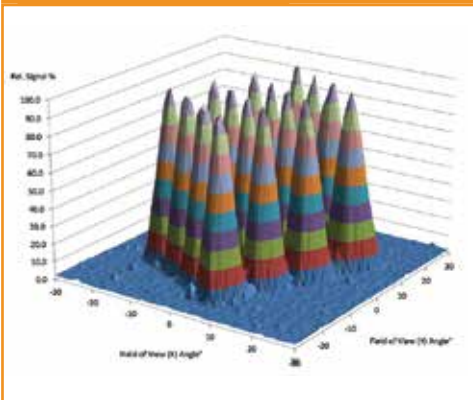
- Digital SMBus
- Factory Calibration
- Ambient Temperature Output
- Low Cost

Product Description

This small Infrared Array Sensor offers 4 x 4 pixels. With this it offers the benefits of easy signal processing with spatial infrared imaging at low cost.

The module includes a small IR transmissive lens and the Thermopile Sensor. A microprocessor on the module board provides a calibrated signal and acts as the Bus interface. These new modules are supplied with a 4-pin connector.

Field of View TPiA 4.4T



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Parameter	Symbol		Unit	Conditions
Operation Conditions				
Operating Voltage	V_{DD}	4,5...5,5	V	
Supply Current	I_{DD}	5	mA	typ, V_{DD} 3V
Operating Temperature	T_o	-25...+100	°C	T_{obj} =25°C
Sensing Range		60	°C	
Optical Characteristics				
Field of View	FoV_x	30	Degree	peak to peak
Field of View	FoV_y	20	Degree	peak to peak
Spectral range				
Interface Characteristics				
Interface		SMBus		
Signal Refresh Time		400	ms	