

Picture of a person with raised arms

## HTPA8x8d

### Infrared Thermopile Array Sensors for Remote Temperature Measurement and Imaging Applications

The HTPA8x8d is the world smallest infrared array sensor with a resolution of 8x8 Pixel inside a TO-46 housing.

Due to the digital I<sup>2</sup>C interface only 4 pins are needed. It has a built-in EEPROM to store all calibration data and a 16 bit ADC. The speed can be set internally via the sensor clock and ADC-resolution between 89 Hz (highest resolution) and 160 Hz (lower resolution).

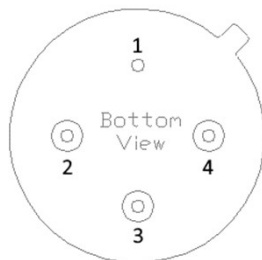
#### Available Optics



Optics	L0.8 (TO-46)	L2.1 (TO-46)
FoV[°]	51 x 51	19 x 19
Length of cap[mm]	2.91	3.9
F-number	0.8	0.8

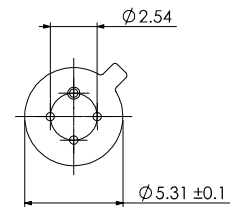
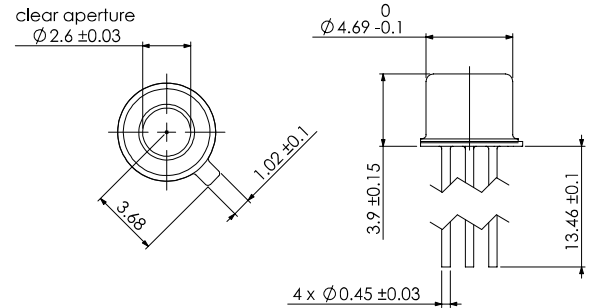
#### Pin Configuration

Pin	Function
1	VSS
2	VDD
3	SCL
4	SDA



#### Dimensions

HTPA8x8L2.1, TO-46 housing



#### Characteristics

Parameter	Value	Tolerance	Unit
Supply voltage (DC)	3.3	+ 0.3/-0.0	V
Current consumption	2	± 0.5	mA
Clock frequency (Sensor)	5	± 3	MHz
Ambient temperature range	-20 to 85		°C
Object temperature range	-20 to >1000		°C
Framerate	7 to 160		Hz
NETD	ca. 100		mK@1Hz*

\* NETD for required framerate:  $NETD@1Hz \times \sqrt{Framerate}$