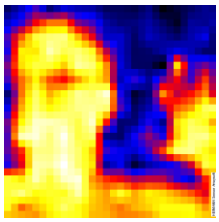
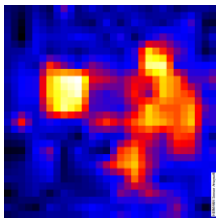




HTPA16x16d

Infrared Thermopile Array Sensor

The HTPA16x16d is an infrared array sensor with a resolution of 16x16 pixel in a TO39 housing. Due to the digital I²C 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 up to 30 Hz (highest resolution) or up to 120 Hz (lowest resolution).

Parameter	*Value*	*Tolerance*	*Units*
Supply voltage (DC)	3.3-3.6		V
Current consumption	3.5	± 1.0	mA
Clock frequency (Sensor)	5	± 3	MHz
Ambient temperature range	-20 to 85		°C
Object temperature range	-20 to >1000		°C
Framerate (full frame)	2 to 120		Hz
Framerate (half frame)	8 to 240		Hz
NETD	240		mK@1Hz

Available Optics:

Optic	L2.1[Si]	L3.6[Si]	L5.0[Ge]*	L7.0[Si]	L5.0[Ge]**
FoV [°]	45	21	16	11	16
Length of cap [mm]	4.53	6.71	7.63	9.4	10.41
F-number	0.8	0.9	0.85	1.2	0.85

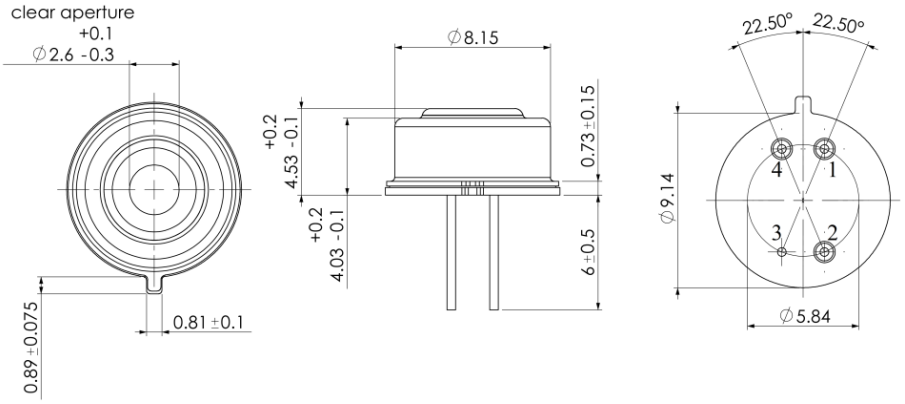
*: Ge optics are having the best performance but are more expensive

**: Same optics, but an external aperture for better performance is added

Package outline:

HTPA16x16L2.1, TO39 housing
(Other optics are available)

Pin	*Function*
1	Clock (I²C)
2	3.3 V supply
3	Ground
4	SDA (I²C)



Modifications reserved Rev.01 / 01.09.2017

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