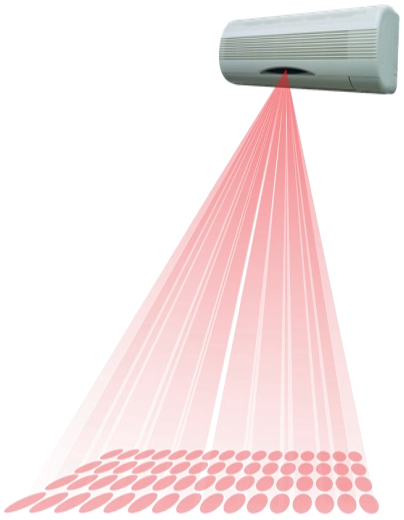
MLX90621

16x4 pixel thermal imager

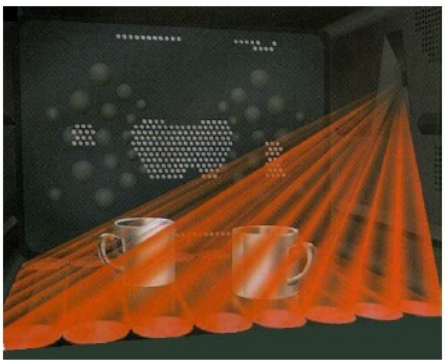
The MLX90621 is a 16X4 array of pixels sensitive to thermal infrared radiation. It has improved considerably on speed and temperature resolution (x4) compared to the previous generation product. This exciting high speed product update further broadens the application potential of low cost thermal imaging. Hence Melexis confirms its position as leading sensor supplier in the market for low cost, low resolution thermal imaging and multi-point non-contact temperature measurement.



Typical applications

Home Appliances
MLX90621's ability to detect, count and localize people and provide a detailed temperature map of the room makes it ideal for smart & green HVAC (Heat-Ventilation– AirCo) systems. In fact MLX90621 is the sensor solution of choice for every smart home appliance benefiting from features like people detection or a multipoint temperature measurement. The latter feature is for example used in smart microwave ovens allowing superior automated cooking programs.

Firefighting
With its wide temperature range MLX90621 can help firefighters detecting hot spots and victims in very difficult conditions.

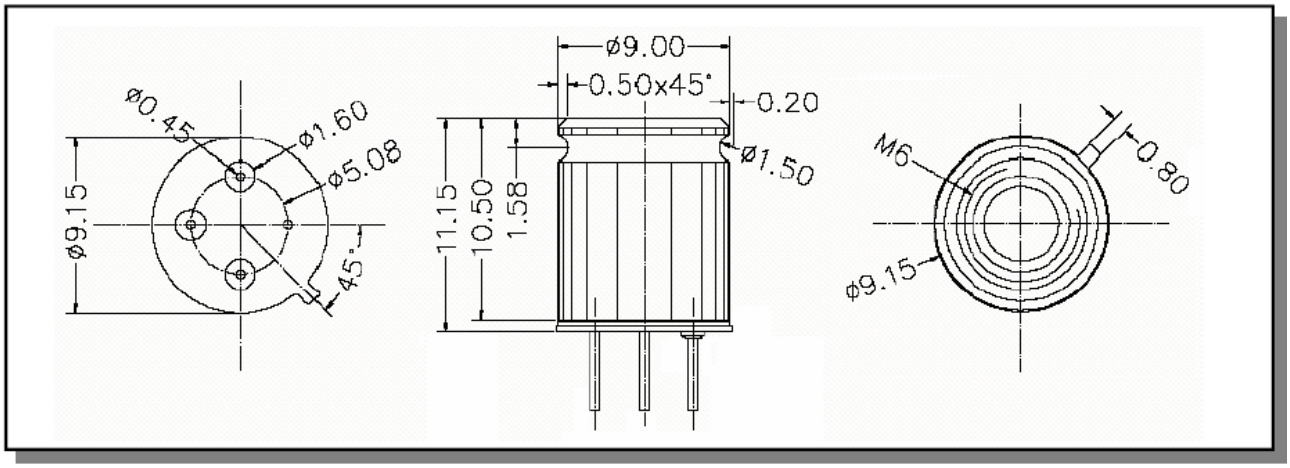


Security, surveillance & smart buildings
MLX90621 is able to address a number of key pains that the currently available solutions in the surveillance and smart buildings market suffer from. Motion sensor based systems for example are blind for static people and might suffer from false alarms triggered by animals. CMOS camera based systems require complex image processing algorithms and easily mistake any human shapes (e.g. shadows) for people.

Automotive
MLX90621 enables passenger/driver detection and acts as input sensor for the HVAC control system.

Features and benefits

- 16x4 pixels thermal imager in TO-39 package;
- No additional external optics required, lens and tube are integrated
- Factory calibrated in wide temperature range:
- -40 to 85°C for ambient temperature;
- -20 to 300°C for object temperature;
- Improved speed vs. Noise Equivalent Temperature Difference: NETD <0.4K RMS @16Hz
- ±1.0°C accuracy in the range 0-50°C;
- several Field Of View options: 60ºX15º, 40ºX10º and wide Field of View 120ºX30º
- I2C compatible digital interface
- Programmable refresh rate 0,5Hz…512Hz;
- Measurement start trigger for synchronization with external control unit;
- Current consumption less than 7mA;



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