

Quick Reference



InfraRed Thermometer Family

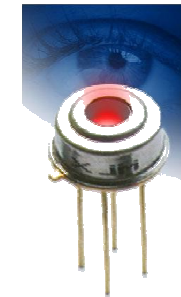
MLX90614

This is a Digital Contactless Infrared Thermometer. The integration of an infrared sensor and dedicated signal processing chip into one small TO-39 results in a plug and play fully calibrated thermometer, ready to be integrated in your automotive, industrial, medical or consumer application.

MLX90615

This is an Ultra Small version of the Contactless Infrared Thermometer, used for applications where 'size does matter'.

Condensed Specification	MLX90614															MLX90615	
	KSF			ESF												SSG	
	AAA	ABA	ACC	AAA	BAA	BCA	BCC	ACC	ACF	BCF	BCI	DAA	DCA	DCH	DCI	DAA	DAG
Field Of View (FOV)	90°	35°		90°			35°		10°		5°	90°	10°	5°	100°	80°	
Diameter (mm)	9.1	10.2		9.1			10.2		9.1						5.4		
Height (mm)	4.1	8.1		4.1			8.1		17.2	20.2		4.1	8.3	20.2	2.7		
Supply Voltage Range	4.5-5.5V			2.6-3.6V				4.5-5.5V			2.6-3.6V						
Supply Current Range	<2mA														<1.5mA		
Sleep Current	N.A.			<6uA				N.A.			<6uA				<3uA		
Accuracy	0.5°C												0.1°C				
Operating Temperature Range	-40-125°C			-40-85°C												-20-85°C	
Measurement Temperature Range	-70-380°C															-20-115°C	
Package Type	TO-39															TO-18	



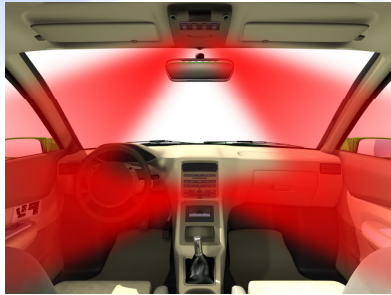
MLX90614

MLX90615



Typical Applications

Automotive



The HVAC system in a car is a complex system due to the strong external influences from sun radiation, drive wind and the large window surface. The Infrared thermometer offers to the HVAC system a reading of the thermal well being of the occupants.

This device is automotive qualified and offers excellent ESD/EMC characteristics, thermal stability and reliability.

Medical Applications



For professional medical applications, the IR thermometers are being used for contamination free temperature measurement in the operating theatre, monitoring equipment in the recovery room and in equipment used to treat or analyze human tissues and fluids.

This application offers for this market a robust, accurate sensor which can even be used as a throw-away item for the most demanding applications like the operating theatre.

Household appliances



Infrared thermometers are being used in high end home appliances for temperature control.

A popular application is the temperature control of food being heated in microwave ovens. The sensor will measure the temperature of the food directly, enabling an improved control of the cooking process.

In this application the excellent EMC characteristics of the thermometer is a major advantage.

For additional information email info@melexis.com or go to our website at: www.melexis.com



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