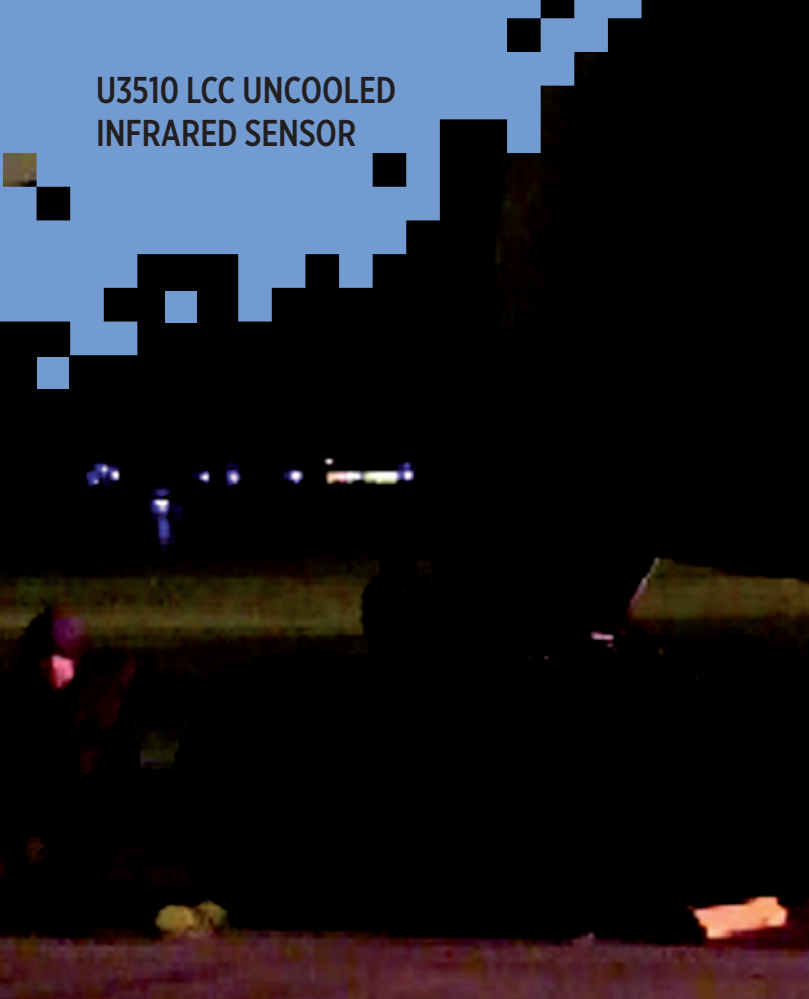


U3510 LCC UNCOOLED INFRARED SENSOR



U3510 LCC UNCOOLED INFRARED SENSOR

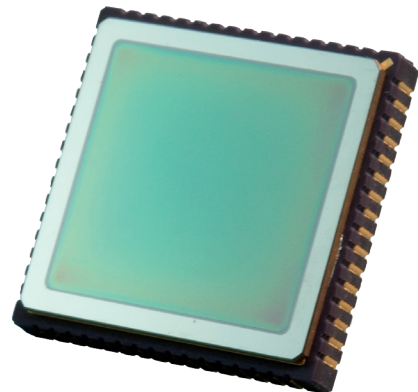
MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

Specifically designed for commercial applications, the U3510 LCC is the market's lightest, most compact thermal imaging detector to offer a resolution of 320 x 240 pixels. Just 1.83 x 1.83 x 0.37 cm in size, the low-cost U3510 LCC weighs less than 4 grams.

With a 25 micron pixel pitch, this uncooled sensor employs vanadium-oxide technology to detect long-wave infrared energy through adverse atmospheric conditions and total darkness to display crystal-clear thermal video images. The U3510 LCC features a low-profile, surface-mountable ceramic leadless chip carrier (LCC) that can be mounted to any printed circuit board using LCC sockets.

Its compact size, light weight and powerful thermal imaging capabilities make the U3510 LCC a leading choice for commercial security, detection and monitoring products.

- Designed for commercial applications
- Low-profile, surface-mountable, ceramic leadless chip carrier
- Smallest, lightest detector providing resolution of 320 x 240 pixels
- Measures just 1.83 x 1.83 x 0.37 cm
- Uncooled, vanadium-oxide, 25 micron pixel pitch detector



U3510 LCC UNCOOLED INFRARED SENSOR

FOCAL PLANE ARRAY

COMPONENT	DESCRIPTION
Detector Type	Uncooled VOx Microbolometer
Array Size	320 x 240
Detector Pitch	25 μm
Spectral Response	LWIR 8 - 14 μm

VIDEO

Frame Rate	60 Hz
Nominal Data Rate	6.25 MHz
Format	NTSC/PAL Compatible

ELECTRICAL

Power	≤ 300 mW Nominal
-------	-----------------------

ENVIRONMENTAL

Operating Temperature	-40°C to +71°C
Storage Temperature	-46°C to +85°C

PERFORMANCE

COMPONENT	DESCRIPTION
Sensitivity (NETD)	<40 mK @ F/1
Multiplexer	CMOS Ripple Integration
Area Fill Factor	90%
Typical Operability	>99%
Number of Analog Outputs	1
Output Voltage Range	0.5 - 4.5 v
Time Constant	≤ 18 msec
Temperature Stabilization	No TEC required (On-Chip Temperature Feedback)
On-chip Non Uniformity Correction (NUC)	6 bits parallel

MECHANICAL

Dimensions (L x W x H)	1.83 x 1.83 x 0.37 cm (0.72 x 0.72 x 0.145 inches)
Weight	≤ 4 g

PART NUMBER

Part Number	1013510-001
-------------	-------------

The information in this data sheet is to the best of our knowledge, accurate as of the date of issue. Leonardo DRS reserves the right to change this information without notice. Nothing herein shall be deemed to create any warranty, expressed or implied. Export of the commodities described herein is strictly prohibited without a valid export license issued by the U.S. Department of State, Directorate of Defense Trade Controls, prescribed in the International Traffic in Arms Regulations (ITAR), Title 22, Code of Federal Regulation, Parts 120-130.

Approved for Release MR-2012-04-617_Rev05