

U3600 LCC

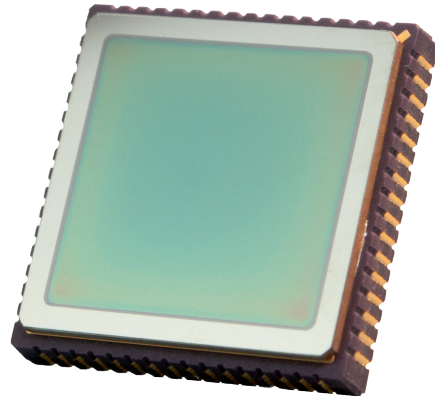
Uncooled Infrared Sensor

MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

An advanced version of the market's smallest, lightest 320 x 240 thermal imaging detector, the low-cost U3600 LCC offers a 17 micron pixel pitch focal plane array for even sharper displays. This uncooled sensor, designed especially for commercial applications, incorporates vanadium-oxide technology for long-wave infrared detection.

Weighing less than 4 grams and measuring just 1.83 x 1.83 x 0.37 cm, the U3600 LCC features a low-profile, surface-mountable ceramic leadless chip carrier (LCC) that can be mounted to any printed circuit board using a LCC socket. Its ability to create crystal-clear thermal images in challenging environmental conditions and even total darkness is maintained by on-chip temperature feedback, which eliminates the need for a thermoelectric cooler.

The U3600 LCC is ideal for commercial products requiring an exceptionally compact and lightweight imaging capability, including security, surveillance and monitoring systems.



U3600 LCC UNCOOLED INFRARED SENSOR

FOCAL PLANE ARRAY

COMPONENT	DESCRIPTION
Detector Type	Uncooled VOx Microbolometer
Array Size	320 x 240
Detector Pitch	17 μ m
Spectral Response	LWIR 8 - 14 μ m

VIDEO

Frame Rate	60 Hz
Nominal Data Rate	5 MHz
Format	NTSC/PAL Compatible

ELECTRICAL

Power	\leq 120 mW Nominal
-------	-----------------------

PART NUMBER

Part Number	1013600-001
-------------	-------------

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	1.2 - 3.2 v
Time Constant	\leq 14 msec
Temperature Stabilization	No TEC required (On-Chip Temperature Feedback)
On-chip Non Uniformity Correction (NUC)	7 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

ENVIRONMENTAL

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

Electro-Optical Infrared Systems

13532 N. Central Expressway
Dallas, Tex 75243
T +1 855 232 2372
www.drsinfrared.com
sales@drsinfrared.com

LeonardoDRS.com
LeonardoDRS.com/Commercial-Infrared

The information in this data sheet is to the best of our knowledge, accurate as of the date of issue. Leonardo DRS, Inc. reserves the right to change this information without notice. Nothing herein shall be deemed to create any warranty, expressed or implied. The products described herein are subject to US Government Export Controls.
Copyright © Leonardo DRS, Inc. 2012 All Rights Reserved.

