DRS Technologies
A Finmeccanica Company

Meeting Today's Challenges to Provide a Secure Future

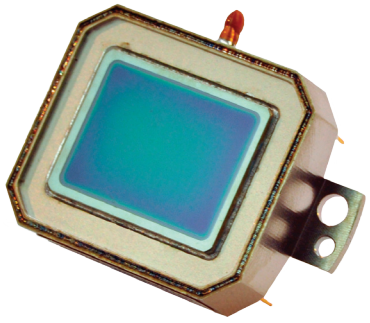
U3510

Military tested, proven in the field of battle, the U3510 thermal imaging detector is a compact, lightweight sensor that supports applications requiring small system design in a high-reliability, long-life package. With its 25 micron pixel pitch, the U3510 produces a sharp thermal image with a resolution of 320 x 240 pixels.

Innovative vanadium-oxide technology enables long-wave infrared detection with this uncooled detector. On chip temperature feedback technology enables the U3510 to operate without the need for a thermoelectric cooler.

Weighing less than 15 grams and measuring 3.18 x 2.03 x 0.79 cm, the U3510 is low in cost, small in size and sturdy in its ruggedized and environmentally sealed ceramic packaging.

- Proven technology, military-tested
- Lightweight, compact, ruggedized detector
- Employs uncooled vanadium-oxide technology for long-wave infrared detection
- 320 x 240 pixel resolution
- 25 micron pixel pitch focal plane array
- Perfect for applications requiring a small system design that offers high reliability and long life



SYSTEM FEATURES

FOCAL PLANE ARRAY

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

PART NUMBER

5012500-0002

PERFORMANCE

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)	3.18 x 2.03 x 0.79 cm (1.25 x 0.8 x 0.31 inches)
Weight	≤15 g

ENVIRONMENTAL

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

* Specifications subject to change without notice.

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