

Uncooled Infrared Detector

LWIR 384 x 288 12 μ m

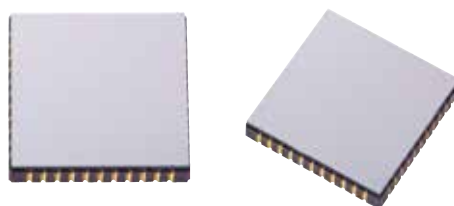
DB384-12C-A

Overview

DB384-12C-A is the high performance 384 x 288, 12 μ m micro-bolometer designed for industrial-commercial thermal imagers. Our higher performance uncooled infrared detector helps infrared camera manufacturers to lead the market in thermography, surveillance & security, car night vision and many other commercial markets.

Description

- DB384-12C-A is an uncooled infrared detector with a reliable, small and lightweight, low input power focal plane array.



Ceramic Package

Main Features

- TECless operation
- Power supply: 5V for analog and digital
- Output dynamic range: 1V to 4V
- Image flip/mirror capability
- 44-leadless ceramic vacuum package
- On-chip temperature sensor
- Typical responsivity: 10 mV/K
- User defined windowing capability

Applications

- Security-Surveillance
- Night Vision
- Marine Navigation
- Next Generation Rifle
- Health and Medical

Images from the 2D IR detector



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Specifications

| Performance | |
|-----------------------|--|
| Detector type | Microbolometer (uncooled) |
| Array format | 384 x 288 |
| Pixel pitch | 12 μm |
| NETD | $\leq 50\text{mK}$ or $\leq 55\text{mK}$ @ F/1, 300K, 30Hz |
| Operability | $\geq 99\%$ |
| Frame rate | Max 60Hz |
| Video output | 1 ch |
| Thermal time constant | $\leq 15\text{ms}$ |
| Operating temperature | $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ |
| Features | |
| Wavelength band | LWIR |
| Spectral range | $8 \sim 14\text{ }\mu\text{m}$ |
| Dimensions | 16.5(W) x 16.5(H) x 2.9(D) mm^3 |
| Weight | $\leq 3\text{g}$ |
| Windowing | Windowing capability |

DB384-12C-A Dimensions

