

PbSe Amplified Infrared Detector

Advantages

- New Automated Chemical Processing (ACP) produces higher yield at lower cost.
- Extremely high reliability under extreme conditions.
- Long shelf life.
- Hermetically sealed package to completely eliminate humidity attack on detection area.
- Wide range of electrical characteristics available.
- Wide range of sizes available.
- Immediate delivery.
- Compact integrated filter/detector combinations.
- 100% tested.
- State of the art microelectronics fabrication capability.
- Specializing in high density arrays.



Description

PDAD series detector integrates a wide range of detector with an amplifier into compact packages. The low noise voltage amplifier is capable of driving 50 Ω loads. PDAD-1IP02300 has a 2x2mm active area lead Selenide (PbSe) detector that covers wavelength from 1 to 5 μ m.

Performance Specification

Parameter	Min	Typical	Max	Unit
Operation Wavelength	1		5	μ m
Active area	2x2 (other sizes are available)			mm
D* (λ pk, 600, 1)		2×10^9		cmHz ^{1/2} W ⁻¹
Peak sensitivity		5×10^3		V/W
Bandwidth (-3dB)		175		kHz
Risetime				μ s
Voltage Gain				-
Output Voltage		± 10		V
Output				-
Operation temperature	10		40	$^{\circ}$ C
Storage temperature	-25		70	$^{\circ}$ C
Package	70x50x21			mm
AC Power Supply	AC-DC Converter			-
Input power	5			W

Mechanical Footprint Dimensions

