



Ultra-Large Area InGaAs p-i-n Photodiode

35PD10M

The 35PD10M is the largest standard InGaAs detector available on the market. Both circular (10 mm diameter) and square (10 mm edge length) formats are offered. Standard packaging includes a hermetic TO-3 header and a ceramic flat pack. Custom packaging would also be available. Reliability is assured by planar, dielectric-passivated design. Applications include high sensitivity instrumentation and test equipment.

Features

Planar Structure
Dielectric Passivation
High Dynamic Impedance
High Responsivity

Device Characteristics:			
Parameters	Test Conditions	Typical Performance	Units
Dark Current	-1.0V	20	μ A
Capacitance	-1.0V	3	nF
Responsivity	1300nm	0.9	A/W
	1550nm	1.0	A/W
Rise Time (est. 50 ohm load)		1.0	μ s
Dynamic Impedance	0V	\geq 60	K ohm
Spectral Range		850 - 1650	nm
Absolute Maximum Ratings			
Reverse Voltage			1 Volt
Forward Current			200 mA
Reverse Current			30 mA
Operating Temperature			-40°C to + 85°C
Storage Temperature			-40°C to + 85°C
Soldering Temperature			250°C

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Application:

Ultra Large Area InGaAs p-i-n Photodiode

Description:

The 35PD10M TO, an InGaAs photodiode with a 5mm-diameter photosensitive packaged in a TO-5 header, is designed for applications in high sensitivity instrumentation and sensing. Devices are hermetically sealed. Class A devices feature very low dark current and high dynamic impedance. High reliability is achieved through planar semiconductor design and dielectric passivation. Clips can also be attached and wire bonded to customer-supplied or other specified packages.

Features:

- Planar Structure
- Dielectric Passivation
- 100% Purge Burn-in
- High Responsivity

Specifications

Operating Voltage Max	-
Dark Current -0.2V Typ	-
Responsivity 1300nm A/W Typ	-
Responsivity 1550nm vs Typ	1
Rise/Fall Typ	1 (vs Typ)
Dynamic Impedance Class A Typ	-
Dynamic Impedance Class B Typ	-

Related Information

Product information:

 [Datasheet: PD10M.pdf](#)

