



High Performance InGaAs p-i-n Photodiode

13PD150-TO

The 13PD150-TO, an InGaAs photodiode with a 150 μ m-diameter photosensitive region packaged in a TO-46 header, is intended for moderate-to-high speed applications. Efficient coupling to multi-mode fiber in active device receptacles is enabled by the relatively large photosensitive area. Planar semiconductor design and dielectric passivation provide low noise performance. Reliability is assured by hermetic sealing and a 100% purge burn-in (200°C, 15 hours, $V_r = 20V$). Chips can also be attached and wire bonded to customer supplied or other specified packages. Headers are available with either a lensed or flat window cap.

Features

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

| Device Characteristics: | | | | | | |
|--------------------------|-----------------|-----|------|------|-------|-----------------|
| Parameters | Test Conditions | Min | Typ | Max | Units | |
| Operating Voltage | - | - | - | -15 | Volts | |
| Dark Current | -5V | - | 0.5 | 2.5 | nA | |
| Capacitance | -5V | - | 1.50 | 2.25 | pF | |
| Responsivity | 1300nm | 0.7 | 0.85 | - | A/W | |
| Rise/Fall | - | - | - | 2 | ns | |
| Absolute Maximum Ratings | | | | | | |
| Reverse Voltage | | | | | | 20 Volts |
| Forward Current | | | | | | 5 mA |
| Reverse Current | | | | | | 1 mA |
| Operating Temperature | | | | | | -40°C to + 85°C |
| Storage Temperature | | | | | | -40°C to + 85°C |
| Soldering Temperature | | | | | | 250°C |