## All Purpose InGaAs p-i-n Photodiode

### 35PD300-TO

The 35PD300-TO, an InGaAs photodiode with a 300 $\mu$ m-diameter photosensitive region packaged in a TO-46 header. This device is one of Telcom Devices' most versatile optoelectronic components, with applications in high sensitivity instrumentation, laser back-facet monitoring, and moderate-bit-rate telecomm and datacomm transmission.. Planar semiconductor design and dielectric passivation provide superior noise performance. Reliability is assured by hermetic sealing and 100% purge burn-in (200°C, 15 hours, Vr = 20V). Headers are available with either a lensed or flat window cap. Chips 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

#### **DEVICE CHARACTERISTICS**

Parameters	Test Conditions	Minimum	Typical	Maximum	Units
Operating Voltage				-15	Volts
Dark Current	-5V			10	nA
Capacitance	–5V		4		pF
Responsivity	1300nm	0.75	0.9		A/W
Responsivity	1500nm		1		ns
Rise/Fall				3	

#### **ABSOLUTE MAXIMUM RATINGS**

Reverse Voltage	20 Volts		
Forward Current	25mA		
Reverse Current	5mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		
Soldering Temperature	250°C		

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# Mechanical Specifications TO-46 Header Packages

Standard TO-46 Lens

0.210 0.184 LENS 0.030 CHIP 0.144 1.00 0.017 3X CATHODE (BIAS +) 0.050 ANODE (BIAS -)  $\sim$ CASE 22.5° 0.040 0.040

Custom packaging is also available.

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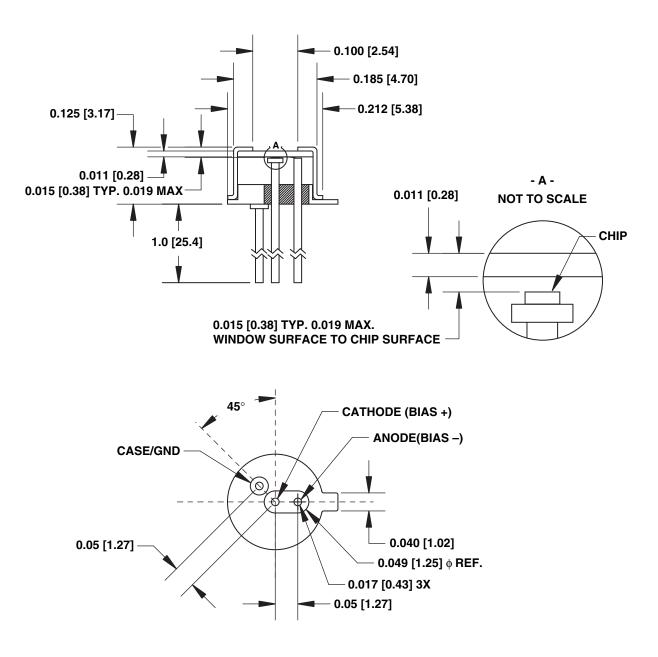
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## Mechanical Specifications TO-46 Header Packages

**TO-46 Ultra Flat Window** 



Custom packaging is also available.

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