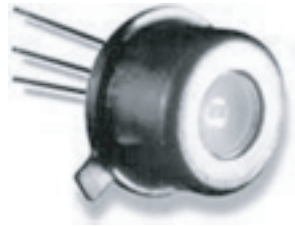


# High Speed InGaAs p-i-n Photodiode

## 13PD55-T0

The 13PD55-T0, an InGaAs photodiode with a 55 $\mu$ m-diameter photosensitive region and packaged in a TO-46 header, is intended for high speed and low noise applications in telecommunications and data communications systems. Planar semiconductor design and dielectric passivation provide very low 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				-30	Volts
Dark Current	-5V		0.05	2	nA
Capacitance	-5V		0.55	0.75	pF
Responsivity	1300nm	0.80	0.9		A/W
Rise/Fall				0.5	ns
Frequency Response	(-3dB)		4		GHz

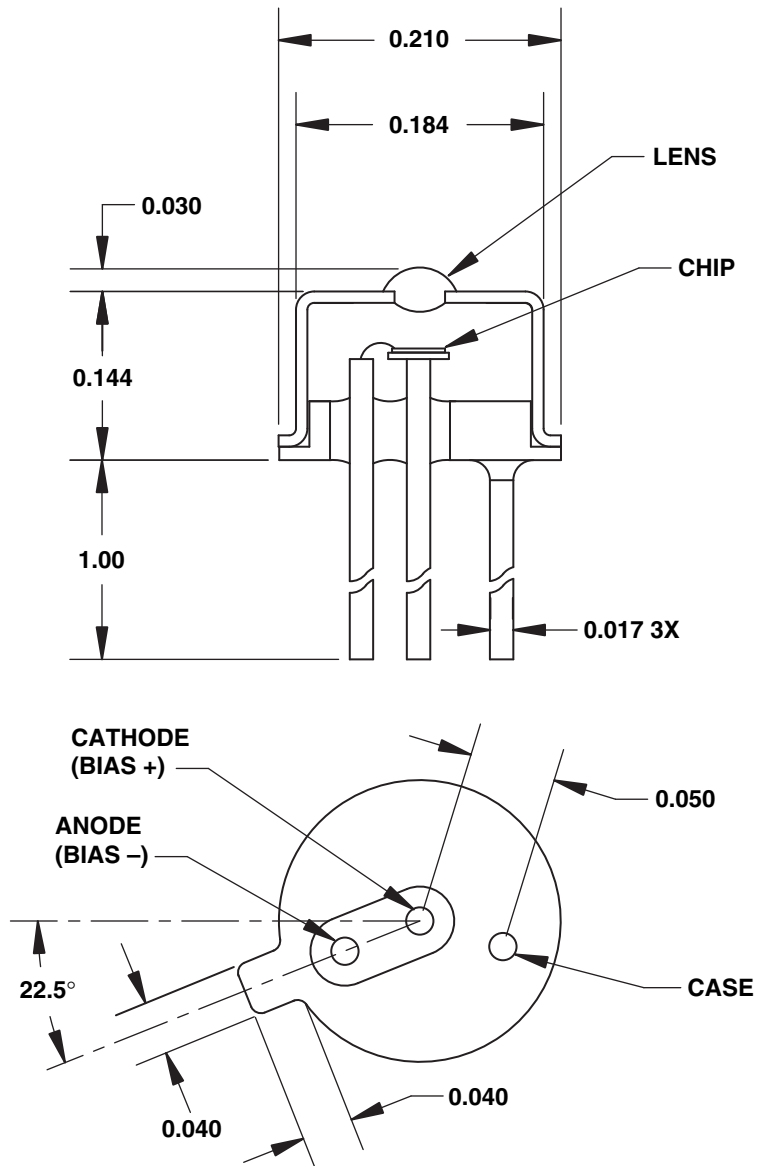
### ABSOLUTE MAXIMUM RATINGS

Reverse Voltage	35 Volts
Forward Current	10mA
Reverse Current	5mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Soldering Temperature	250°C

# Mechanical Specifications TO-46 Header Packages

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## Standard TO-46 Lens



Custom packaging is also available.

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Email: [customerservice@telcomdevices.com](mailto:customerservice@telcomdevices.com) • Website: [www.telcomdevices.com](http://www.telcomdevices.com)

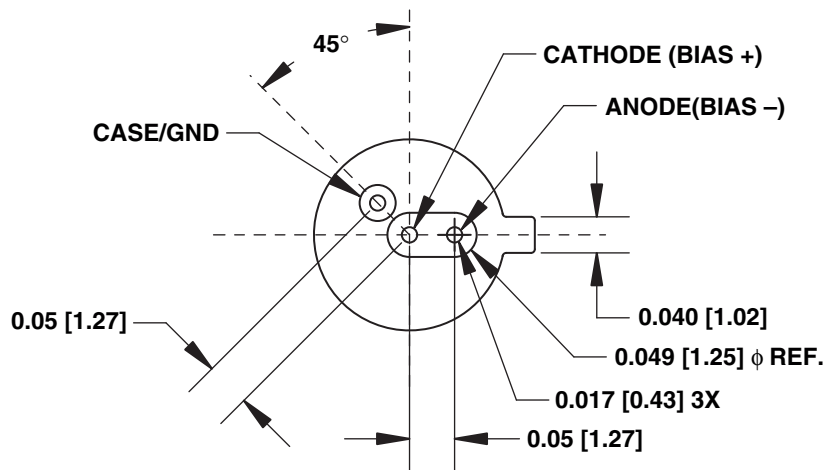
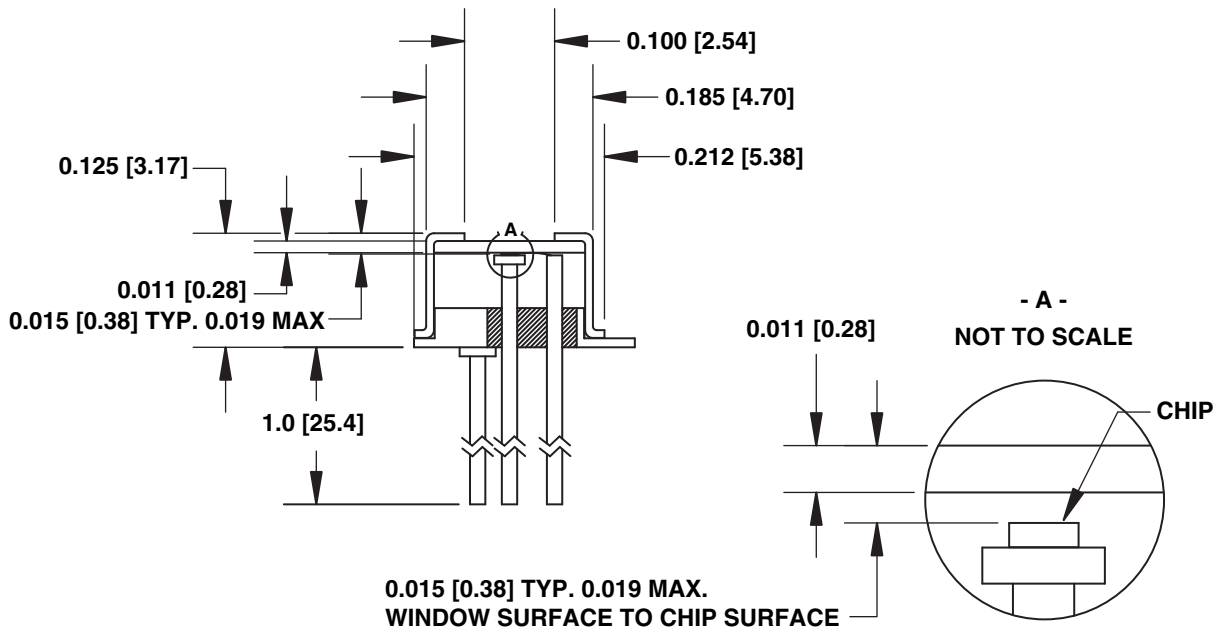


# Mechanical Specifications

## TO-46 Header Packages

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### TO-46 Ultra Flat Window



Custom packaging is also available.

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