High Speed InGaAs p-i-n Photodiode

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13PD100-TO

The 13PD100-TO, an InGaAs photodiode with a 100 μ m-diameter photosensitive region and packaged in a TO-46 header, is the largest standard device enabling a 1GHz frequency cutoff. 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				-20	Volts
Dark Current	-5V		0.5	2	nA
Capacitance	-5V		1.15		pF
Responsivity	1300nm	0.8	0.9		A/W
Rise/Fall				0.5	ns
Frequency Response	(-3dB)		1		GHz

ABSOLUTE MAXIMUM RATINGS

Reverse Voltage	30 Volts		
Forward Current	10mA		
Reverse Current	500μΑ		
Operating Temperature	−40°C to +85°C		
Storage Temperature	-40°C to +85°C		
Soldering Temperature	250°C		

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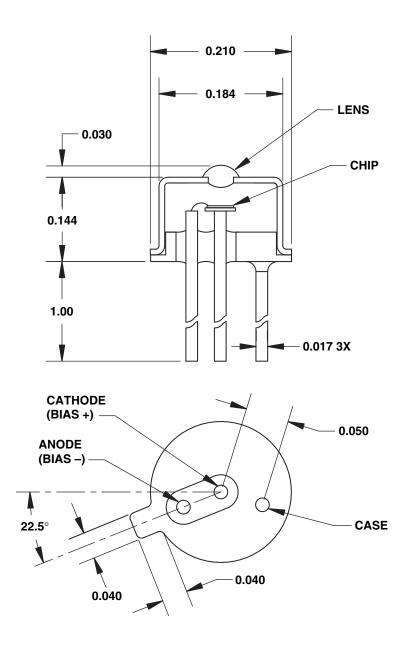
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Mechanical Specifications TO-46 Header Packages

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Standard TO-46 Lens



Custom packaging is also available.

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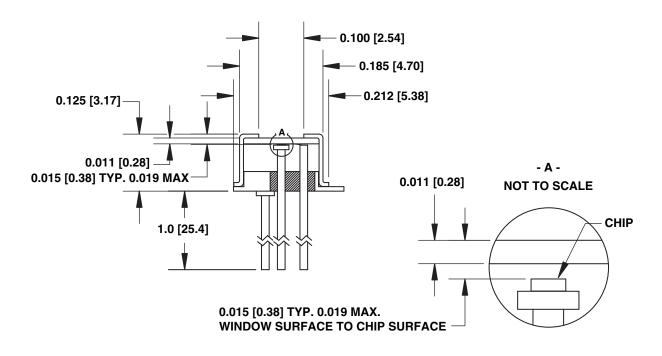
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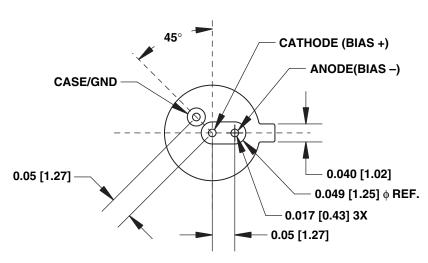


Mechanical Specifications TO-46 Header Packages

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TO-46 Ultra Flat Window





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