Large Area InGaAs p-i-n Photodiode

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35PD3M-TO

The 35PD3M-TO, an InGaAs photodiode with a 3mm-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. 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
Dark Current	Class A -0.3V		50		nA
Capacitance	0V		700		pF
Responsivity	1300nm		0.9		A/W
Responsivity	1500nm		1		A/W
Rise/Fall			175		ns
NEP	Class A		5 x 10 ⁻¹⁴		WHz ^{-1/2}
NEP	Class B		2 x 10 ⁻¹³		WHz ^{-1/2}
D*	Class A		4 x 10 ¹²		cmHz ^{1/2W-1}
D*	ClassB		1.5 x 10 ¹²		cmHz ^{1/2W-1}

ABSOLUTE MAXIMUM RATINGS

Reverse Voltage	2 Volts		
Forward Current	100mA		
Reverse Current	20mA		
Operating Temperature	−40°C to +85°C		
Storage Temperature	-40°C to +85°C		
Soldering Temperature	250°C		

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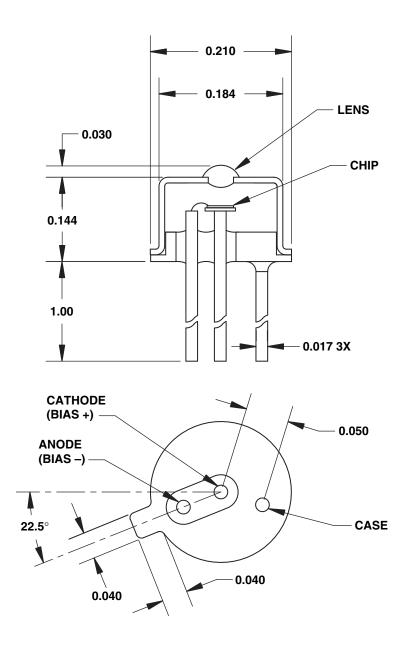
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Mechanical Specifications TO-46 Header Packages

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Standard TO-46 Lens



Custom packaging is also available.

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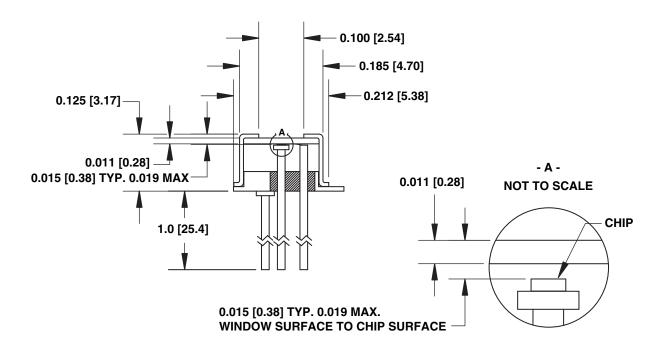
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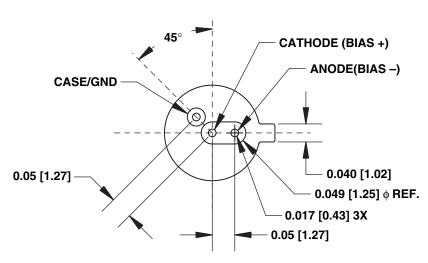


Mechanical Specifications TO-46 Header Packages

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TO-46 Ultra Flat Window





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