

## High Speed InGaAs Pin Photodiode

## 13PD75-TO (GCA)

The planar 13PD75-TO series of InGaAs photodiodes is intended for high speed, low noise, and high linearity applications. The diameter of the photosensitive region is sufficiently small to enable very low dark current and low capacitance operation while offering efficient coupling to multi-mode fibers. Devices are hermetically sealed in standard TO-46 headers with either ultra flat or lensed window caps. High reliability is achieved through planar, dielectric-passivated design, and 100% purge burn-in (  $200^{\circ}$ C, 15 hours,  $V_r = 20V$ ). 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		Min	Тур	Max	Units
Operating Voltage	-		-	-	-20	Volts
Dark Current	-5V	-	0.2	2	nA	1
Capacitance	-5V	-	-	0.9	0 pF	7
Responsivity	1300nm		0.90	0.95	-	A/W
Rise/Fall	-		-	-	0.5	ns
Frequency Respon	ise (-3dB)		-	1.5	-	GHz
Absolute Maximum Ratings						
Reverse Voltage						30 Volts
Forward Current			5 mA			
Reverse Current			5 mA			
Operating Temperature			$-40^{\circ}$ C to $+85^{\circ}$ C			
Storage Temperature			$-40^{\circ}\text{C} \text{ to} + 85^{\circ}\text{C}$			
Soldering Temperature			250°C			