



High Speed InGaAs p-i-n Photodiode

13PD75LDC-S

The 13PD75LDC-S, an InGaAs photodiode with a 75 μ m-diameter photosensitive region and mounted on a metallized ceramic substrate, is a low-dark-current version of the 13PD75 intended for high speed and low noise applications. The diameter of the photosensitive region is sufficiently small to enable operation at low dark current and low capacitance while offering efficient coupling to multi-mode fiber. Reliability is assured by 100% purge burn-in (200°C, 15 hours, $V_r = 20V$), planar semiconductor design and dielectric passivation. Chips can also be attached and wire bonded to customer-supplied or other specified submounts.

Features

Planar Structure
Dielectric Passivation
100% Purge Burn-In
High Responsivity

Device Characteristics						
Parameters	Test Conditions	Min	Typ	Max	Units	
Operating Voltage	-	-	-	-20	Volts	
Dark Current	-5V	-	-	0.11	nA	
Capacitance	-5V	-	0.4	0.6	pF	
Responsivity	1300nm	0.80	0.90	-	A/W	
Rise/Fall	-	-	-	0.5	ns	
Frequency Response	(-3dB)	-	1.5	-	GHz	
Absolute Maximum Ratings						
Reverse Voltage						30 Volts
Forward Current						5 mA
Reverse Current						5 mA
Operating Temperature						-40°C to + 85°C
Storage Temperature						-40°C to + 85°C
Soldering Temperature						250°C