



High Speed InGaAs p-i-n Photodiode

13PD55-S

The 13PD55-S, an InGaAs photodiode with a 55 μ m-diameter photosensitive region and mounted on a metallized ceramic substrate, is intended for high speed and low noise applications in telecommunication and data communication systems. Planar semiconductor design and dielectric passivation provide very low noise performance. Reliability is assured by 100% purge burn-in (200°C, 15 hours, $V_r = 20V$). 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	-	-	-	-30	Volts
Dark Current	-5V	-	0.05	2	nA
Capacitance	-5V	-	0.3	0.5	pF
Responsivity	1300nm	0.80	0.90	-	A/W
Rise/Fall	-	-	-	0.5	ns
Frequency Response	(-3dB)	-	4	-	GHz
Absolute Maximum Ratings					
Reverse Voltage					35 Volts
Forward Current					10 mA
Reverse Current					5 mA
Operating Temperature					-40°C to + 85°C
Storage Temperature					-40°C to + 85°C
Soldering Temperature					250°C