



2.5Gbps InGaAs PIN Photodiode with AGC Pre-Amplifier, 5-pin PDT-A13P5-2GF3

Data Sheet



Features

- Industry standard TO-46 package with short cap lens and tab-less
- Optimized for fiber optic applications
- Designed for long wavelength 2.5Gbps to 4.25Gbps applications
- Photocurrent monitoring functionality available
- Single +3.3V power supply requirement

Specifications

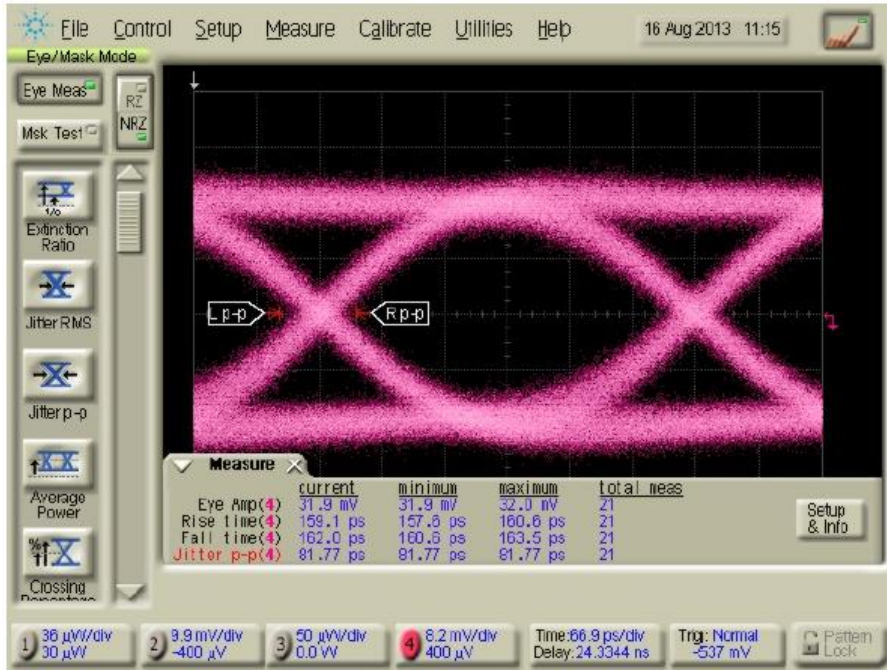
Electro-Optical Characteristics (Typical values are at + 3.3V@25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power Supply	V _{CC}	3.0	3.3	3.6	V	
Supply Current	I _{CC}	30	34	42	mA	No loads
Differential Responsivity	R _d	10	16	26	mV/uW	λ=1490nm, R _{load} =100ohm, P=-27dBm
Single Ended Responsivity	R _s	5	8	13	mV/uW	λ=1490nm, R _{load} =50ohm, P=-27dBm
Small-Signal Bandwidth	BW	1.4			GHz	
Low-Frequency Cut Off	LF		15	25	kHz	
Rise/Fall Time (20-80%)	tr/tf			200	ps	P=-27dBm, λ=1490nm
Saturation Power	P _{sat}	0	3		dBm	
Single Ended Output Impedance	R _o		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-28	dBm	λ=1490nm, @2.5Gbps, PRBS23, ER=10dB, BER=10 ⁻¹⁰
				-23		λ=1310nm, @4.25Gbps, PRBS7, ER=7dB, BER=10 ⁻¹⁰

Absolute Maximum Ratings					
Parameters	Min.	Max.	Unit	Conditions	
Storage Temperature	-40	100	°C		
Operating Temperature	-40	85	°C		
Lead Solder Temperature		260	°C	10 seconds	

Typical Characteristics

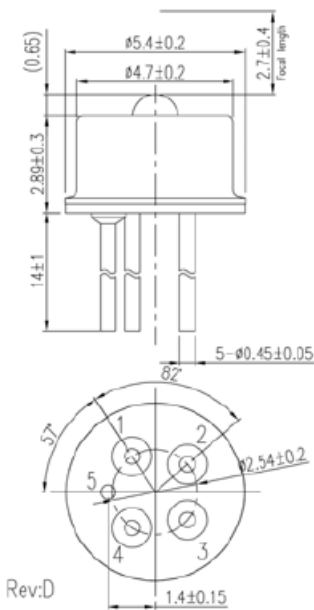
Eye Diagram

R_{load}=50ohm, P=-27dBm@2488.32Mbps, 1490nm, PRBS 23



tr=159.1ps, tf=162.0ps, Jitter p-p=81.77ps

Outline Dimensions (unit: mm)



- Pinout:**
1. Dout
 2. Vcc
 3. Isource
 4. Dout
 5. Gnd

Note: Specifications are subject to change without notice.