



2.5Gbps 1260nm~1620nm InGaAs PIN plus AGC Pre-Amplifier Photodiode in TO-46 Package, 5-pin

Part No. PDT-A13P5-2GE3

Features

- 1310nm/1550nm InGaAs PINTIA 5 pin TO
- Industry standard TO-46 package with AR coating cap lens and tab-less
- Optimized for fiber optic application and high sensitivity application
- Design for long wavelength 2.5Gbps applications
- Photocurrent monitoring available
- Single power supply +3.3V

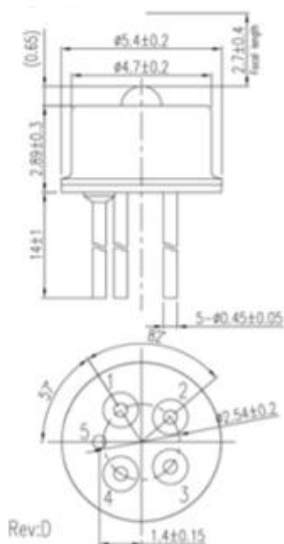


Specifications

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}		43	50	mA	No loads
Differential Responsivity	R _d	9	14.4	23	mV/uW	λ=1490nm, R _{load} =100ohm, P=-28dBm
Single Ended Responsivity	R _s	4.5	7.2	11.5	mV/uW	λ=1490nm, R _{load} =50ohm, P=-28dBm
Small-Signal Bandwidth	BW	1.4			GHz	
Low-Frequency Cut Off	LF		20		kHz	
Rise/Fall Time (20-80%)	tr/tf		170	200	ps	P=-28dBm, λ=1490nm
Saturation Power	P _{sat}	0	3		dBm	
Single Ended Output Impedance	R _o		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-27.5	dBm	T _A =25°C, λ=1490nm, @2488.32Mbps, PRBS23, ER=10dB, 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	

Outline Dimensions (unit: mm)

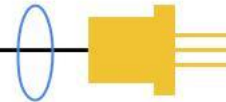


- Pinout:**
1. Dout
 2. Vcc
 3. I_{source}
 4. Dout
 5. Gnd

Lasermate Group, Inc.

19608 Camino De Rosa, Walnut, CA 91789, USA

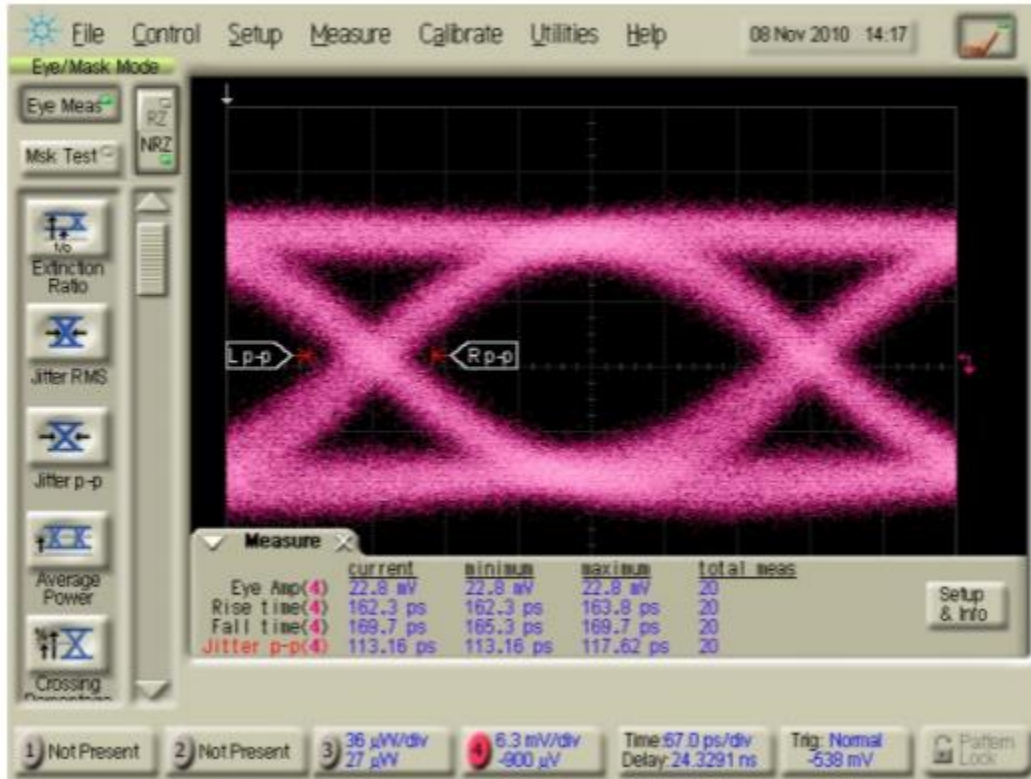
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Typical Characteristics

Eye Diagram

$R_{load} = 50\Omega$, $P = -28\text{dBm}$ @2488.32Mbps, 1490nm, PRBS 23.



$t_r=162.3\text{ps}$, $t_f=169.7\text{ps}$, Jitter p-p= 113.16ps

Note: Specifications are subject to change without notice.