



PDT-A13P5-4GB3

4.25Gbps InGaAs PIN plus AGC Pre-Amplifier Photodiode in TO-46 Package, 5-pin

Overview

The Lasermate PDT-A13P5-4GB3 is a high-speed, high sensitivity 4.25Gb/s InGaAs photodetector integrated with a transimpedance amplifier (TIA) in a 5-pin TO-46 package with short cap lens, specifically designed for 1310nm/1550nm band optical fiber communications.



Features

- 1310nm/1550nm InGaAs PINTIA 5 pin TO
- Industry standard TO-46 package with short cap lens and tab-less
- Photocurrent monitoring available
- Single power supply +3.3V

Applications

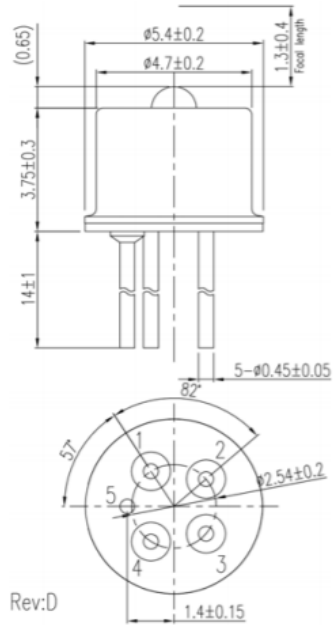
- Optimized for fiber optic application
- Design for long wavelength 4.25Gbps applications

Specifications

Electro-Optical Characteristics (T _A =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		2.2		mV/uW	λ=1310nm, R _{load} =100ohm, P=-18dBm
Single Ended Responsivity	R _s		1.1		mV/uW	λ=1310nm, R _{load} =50ohm, P=-18dBm
Small-Signal Bandwidth	BW		2.5		GHz	P=-18dBm
Low-Frequency Cut Off	LF		15		kHz	
Rise/Fall Time (20-80%)	tr/tf			150	ps	λ=1310nm, P=-18dBm
Saturation Power	P _{sat}	0			dBm	
Single Ended Output Impedance	R _o		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-23	dBm	λ=1310nm, @4.25Gbps, PRBS7, ER=6dB, 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:

Pin no.	Function
1	Dout(+)
2	Vcc
3	Isource
4	Dout(-)
5	Gnd

Note: Specifications are subject to change without notice.