

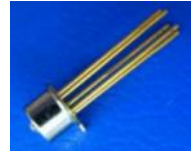


PDT-A13P5-1MA4

125MHz InGaAs PIN plus AGC Pre-Amplifier Photodiode in TO-46 Package, 5-pin

Overview

The Lasermate PDT-A13P5-1MA4 is a high-speed, high sensitivity 100/155Mbps InGaAs photodetector integrated with a transimpedance amplifier (TIA) in a 5-pin TO-46 package with 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 cap lens
- Supports 3.3V to 5.0V applications

Applications

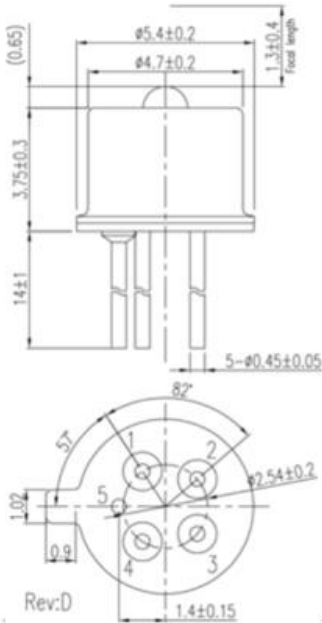
- Optimized for fiber optic application
- Suitable for 100/155 Mbps applications

Specifications

Electro-Optical Characteristics (Typical values are at $V_{CC}=3.3V$ at $25^{\circ}C$)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power Supply	V_{CC}	3.0		5.5	V	
Supply Current	I_{CC}			35	mA	No loads
Differential Responsivity	R_d	0.10		120	mV/uW	$\lambda=1310nm, R_{load}=100ohm$
Single Ended Responsivity	R_s	0.05		60	mV/uW	$\lambda=1310nm, R_{load}=50ohm$
Small-Signal Bandwidth	BF	115			MHz	$\lambda=1310nm, P_f=10uW$
Rise/Fall Time (20-80%)	t_r/t_f			4.5	ns	$\lambda=1310nm, P_f=10uW$
Saturation Power	P_{sat}	0			dBm	$\lambda=1310nm$
Single Ended Output Impedance	R_o		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-36	dBm	$\lambda=1310nm, @155.52Mbps, PRBS23, BER=10^{-10}$

Absolute Maximum Ratings					
Parameters	Min.	Max.	Unit	Conditions	
Storage Temperature	-40	100	$^{\circ}C$		
Operating Temperature	-40	85	$^{\circ}C$		
Lead Solder Temperature		260	$^{\circ}C$	10 seconds	

Outline Dimensions (unit: mm)



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

Note: Specifications are subject to change without notice.