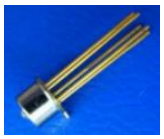
PDT-A13P5-1MB4
125MHz InGaAs PIN plus AGC Pre-Amplifier Photodiode in TO-46 Package, 5-pin

Overview



The Lasermate PDT-A13P5-1MB4 is a high-speed, high sensitivity 100/155Mbps 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
- Supports 3.3V to 5.0V applications

Applications

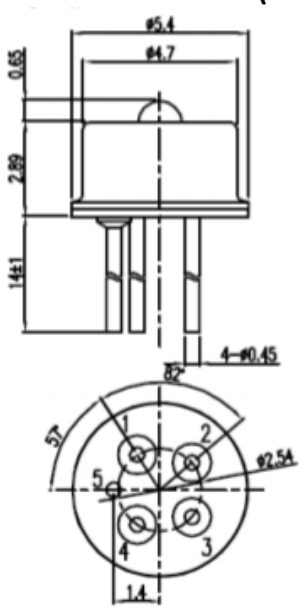
- Optimized for fiber optic application
- Suitable for 100/155 Mbps applications

Specifications

Electro-Optical Characteristics (Typical values are at V_{CC}=3.3V at 25°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	λ=1310nm, R_{load}=100ohm
Single Ended Responsivity	R_s	0.05		60	mV/uW	λ=1310nm, R_{load}=50ohm
Small-Signal Bandwidth	BF	115			MHz	λ=1310nm, P=-20dBm
Rise/Fall Time (20-80%)	tr/tf			4.5	ns	λ=1310nm, P=-20dBm
Saturation Power	P_{sat}	0			dBm	
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-36	dBm	λ=1310nm, @155.52Mbps, PRBS23, 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. Vpd
4. Dout
5. Gnd

Note: Specifications are subject to change without notice.