



PDT-A85P5-4GA3

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

Overview

The Lasermate PDT-A85P5-4GA3 is a high-speed GaAs photodetector integrated with a transimpedance amplifier (TIA) in a 5-pin TO-46 package with cap lens that supports 4.25Gbps data rates at 850nm.



Features

- 850nm GaAs PIN TIA 5 pin TO
- Industry standard TO-46 package with cap lens and tab-less
- Optimized for fiber optic application
- Design for short wavelength 4.25Gbps applications
- Photocurrent monitoring available
- Single power supply from +3.3V

Applications

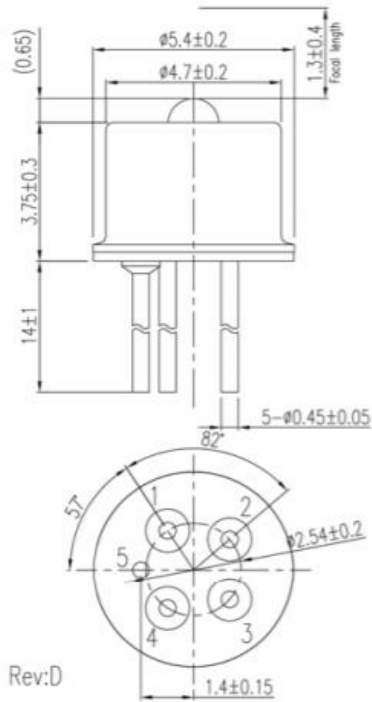
- Optimized for fiber optic application

Specifications

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

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		1.2		mV/uW	λ=850nm, R _{load} =100ohm, P=-15dBm
Single ended responsivity	R _s		0.6		mV/uW	λ=850nm, R _{load} =50ohm, P=-15dBm
Small-signal bandwidth	BW		2.5		GHz	λ=850nm, P=-15dBm
Low frequency cut off	LF		15		kHz	
Rise/Fall Time (20-80%)	tr/tf		135		ps	λ=850nm, P=-15dBm
Saturation power	P _{sat}	0			dBm	
Single ended output impedance	R _o		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-21	dBm	λ=850nm, @4.25Gbps, PRBS7, ER=7dB, BER=10 ⁻¹⁰

Outline Dimensions (unit: mm)



Pin Configuration

Pin Number	Function
1	Dout(+)
2	Vcc
3	Isource
4	Dout(-)
5	Gnd

Note: Specifications are subject to change without notice.