

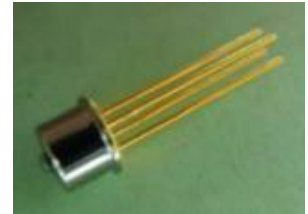


2.5Gbps 850nm GaAs PIN plus Pre-amplifier Photodiode in TO-46 Package, 4-pin

Part No. PDT-A85P4-2GA3

Features

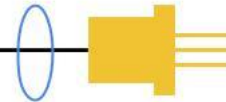
- 850nm GaAs PIN TIA 4 pin TO
- Industry standard TO-46 package with cap lens
- Optimized for fiber optic application
- Suitable for 2.5Gbps applications
- Single power supply from +3.3V



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

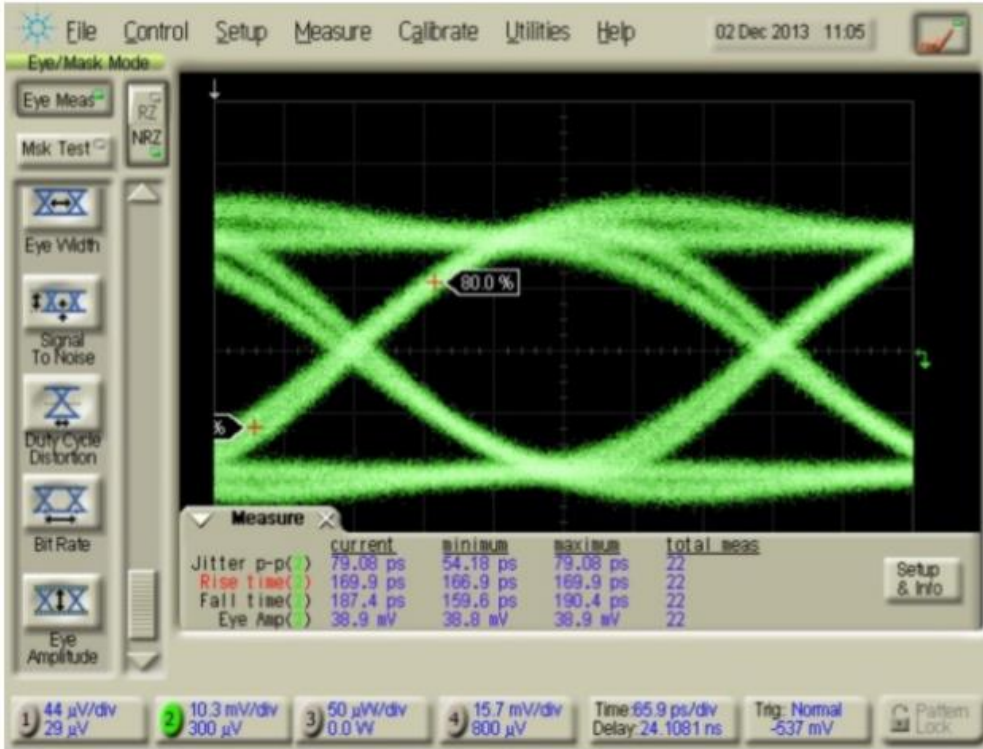
Electro-Optical Characteristics (Typical values are at +3.3V @ 25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power supply	V _{CC}	3.0	3.3	3.6	V	
Supply current	I _{CC}	15	20	24	mA	No loads
Differential responsivity	R _d		3.6		mV/uW	λ=850nm, R _{load} =100ohm, P=-20dBm
Single ended responsivity	R _s		1.8		mV/uW	λ=850nm, R _{load} =50ohm, P=-20dBm
Small-signal bandwidth	BW		1.5		GHz	P=-20dBm
Low-Frequency Cut off	LF		30		kHz	
Rise / Fall Time (20%~80%)	tr/tf			200	ps	P=-20dBm, λ=850nm
Saturation Power	P _{Sat}	0			dBm	
Maximum Differential Output Voltage			140	270	mVp-p	λ = 850nm, R _{load} =100ohm, P= -15dBm
Single Ended Output Impedance	R _o		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-23	dBm	λ = 850nm, @2488.32Mbps, PRBS7, ER=10dB, BER=10 ⁻¹⁰



Typical Characteristics

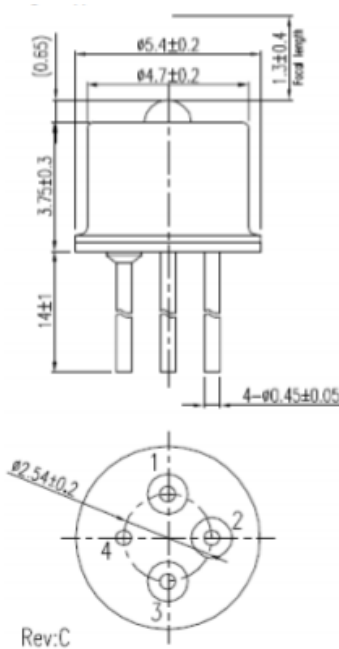
Eye Diagram

$R_{load} = 50\Omega$, $P = -20\text{dBm}$ @2488.32Mbps, 850nm, PRBS7.



$t_r = 169.9\text{ps}$, $t_f = 187.4\text{ps}$, Jitter p-p = 79.08ps

Outline Dimensions (unit: mm)



Pinout:

1. Dout
2. Vcc
3. Dout
4. Gnd

Note: Specifications are subject to change without notice.