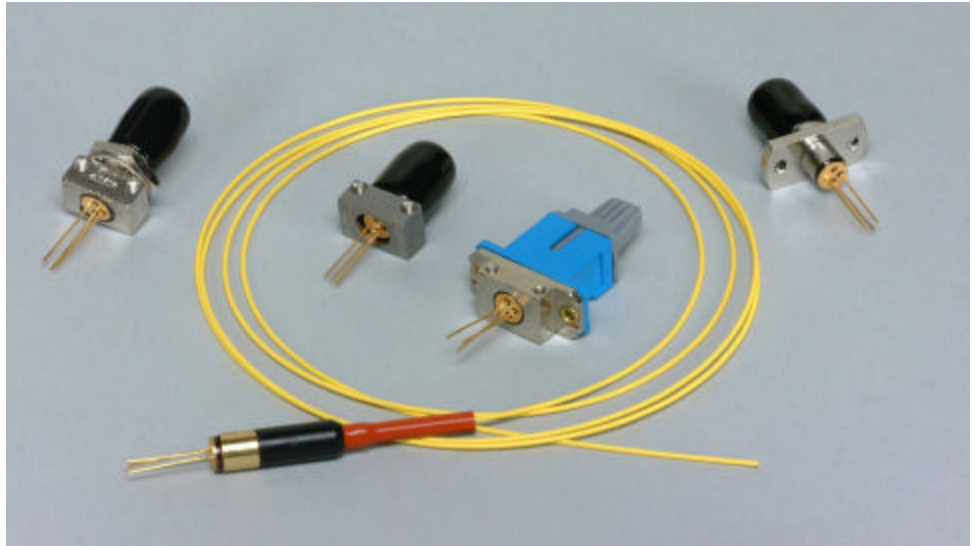


**InGaAs PIN TIA Receivers**

PD-LD Inc. offers low noise, high responsivity InGaAs photo detectors paired with a transimpedance amplifiers (TIA) in convenient fiber coupled packages. These assemblies incorporate a 55 micron diameter active area detector that responds optimally to both 1310 and 1550 nm light sources. This PIN/Preamp combination delivers superior characteristics making them ideal for both digital and analog systems. Each module contains a TIA whose bandwidth is ideally suited to the industry standard transmission speed of 2.5GBs. All devices include automatic gain control (AGC), a feature that allows the circuit to operate with high optical input power without becoming saturated. AGC makes possible full dynamic range receivers, lessening the need to use attenuators within the cable plant. These modules are available with either bare or connectorized fiber pigtailed or in receptacle style housings suitable for board or panel mounting. These high reliability units are operational over industrial environmental conditions.



Applications

- Networking
- Telecommunications  
SONET  
SDH
- Storage  
Fiber Channel

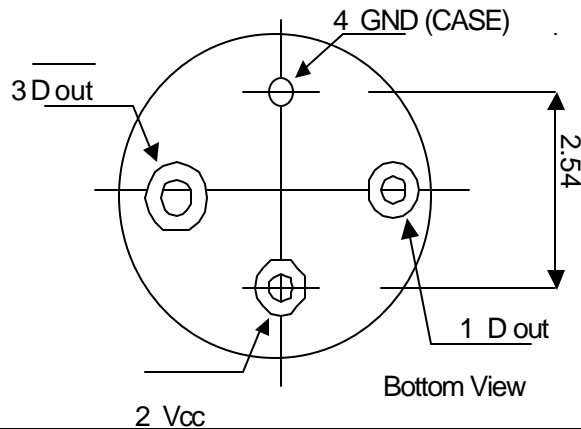
Features

- IEEE 802.3 Performance
- ITU G.957 Compliant
- -40 to 85°C Operating Range
- Differential Output
- Operates with 3.3V Supply
- Pigtailed w/9/125 μm Fiber

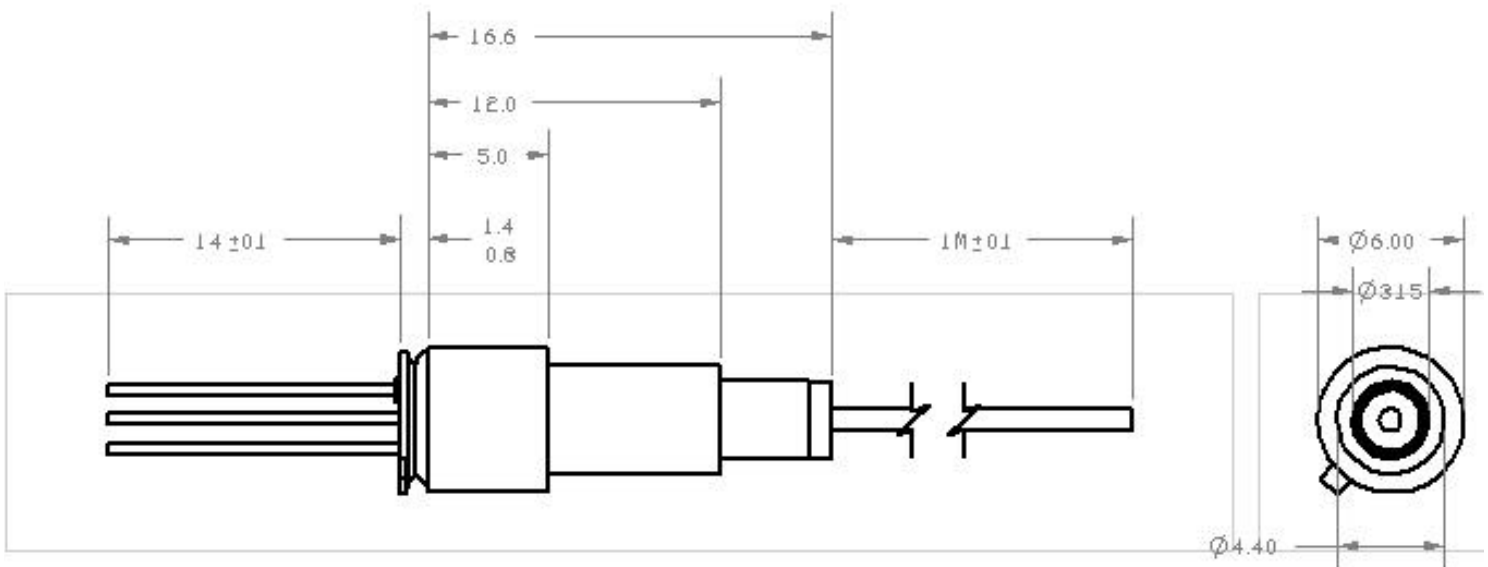
Parameter	Units	Symbol	2.5 GBs		
			Min.	Typ.	Max.
Operating Wavelength	nm	Lambda	1100	1600	
Differential Responsivity (R <sub>load</sub> =100 ohm, P= -18dBm)	mV/μW	G	1.4	-	3.0
Single Ended Responsivity (R <sub>load</sub> =100 ohm, P= -18dBm)	mV/μW	G	0.7	-	1.5
Small Signal Bandwidth	MHz	BW	1.65		
Rise and Fall Times (20%~80%, P= -18dBm)	psec	t <sub>r,f</sub>	—	150	200
Power Supply	V	V <sub>cc</sub>	3.0	3.3	3.6
Low Frequency Cut off	kHz	LF			5
Optical Sensitivity	dBm	S			-22
Optical Saturation Power	dBm	P <sub>sat</sub>	--	0	-3
Output Resistance (Single Ended)	ohm	R <sub>out</sub>	40	50	60
Operating Current	mA	I <sub>cc</sub>	—	44	60
Storage Temperature	°C		-40	-	100
Operating Temperature	°C		-40	-	85

Specifications are subject to change without notice. Please contact PD-LD Sales .

07-06 2.5G PINTIA TL .Rev A



### Mechanical Drawing for Fiber Pigtailed PIN-TIA Assemblies



#### Pigtailed PIN-TIA

Pigtail: 0.5m 9/125/900um SMF28 fiber ST/PC Connector

Mounting Bracket Options:

PC Board Bracket

PTINAF2.51STD-R-0-.5

Panel Mount Bracket

PTINAF2.51STE-R-0-.5