

# InGaAs Avalanche Photodiode (APD) 2.5 Gbps APD with TIA

## PDFA0055-TOL-T0A

### Applications:

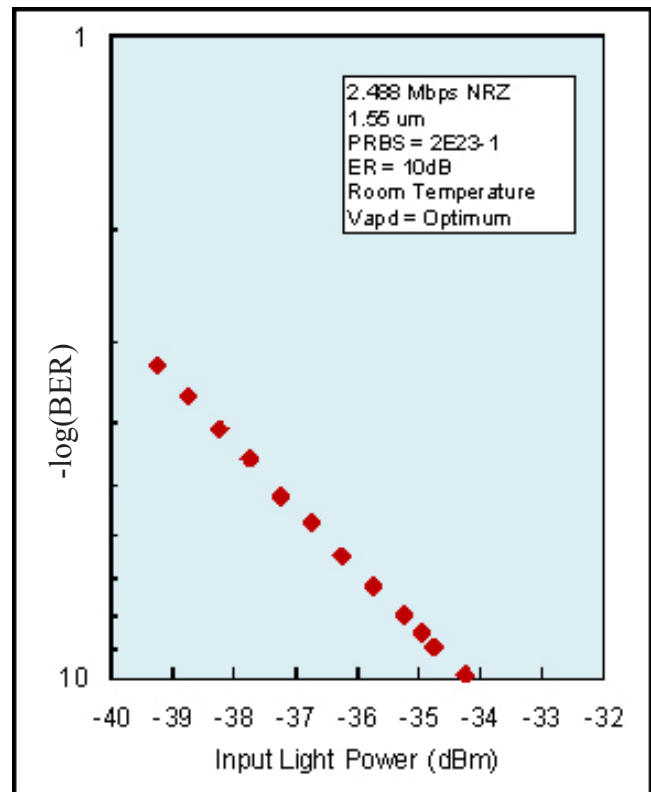
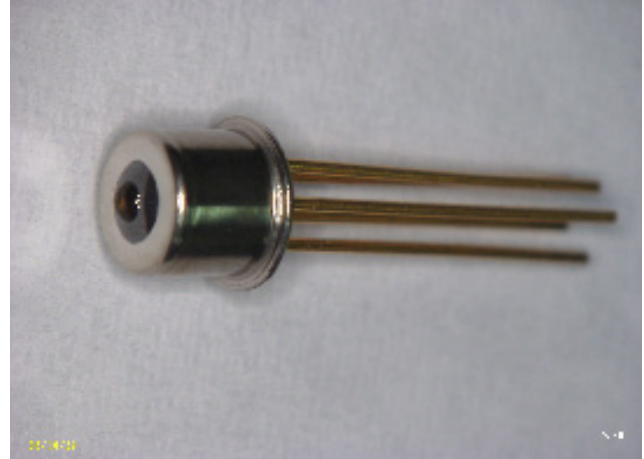
G-PON Transceivers  
SONET OC-48/SDH STM-16 Transmission System  
DWDM System  
Gigabit Ethernet/Fiber Channel Systems

### Features:

Hermetically Sealed  
Planar Structure for High Reliability  
High Sensitivity (-32dBm)  
1000 to 1625nm Spectral Response  
Low Dark Current

### Description:

Go!Foton's Avalanche Photodiode (APD) with TIA is suitable for 2.5 Gbps applications in G-PON transceiver products, and other optical systems. This InGaAs APD has a planar structure for high reliability.



BER Graph

## Specifications:

### Electro-Optical Characteristics

Parameter	Min.	Typ.	Max.
Supply Current (mA)		45	60
APD Breakdown Voltage (V)	35	50	65
Cut-off Frequency (GHz)	1.8		
Optical Overload (dBm)	-3		
Sensitivity (dBm)			-32

1) Condition unless otherwise noted: 25°C, Popt=1μW

2) 2.5Gbps, BER = 10<sup>-10</sup>, PRBS 2<sup>23</sup>-1

### Recommended Operating Condition

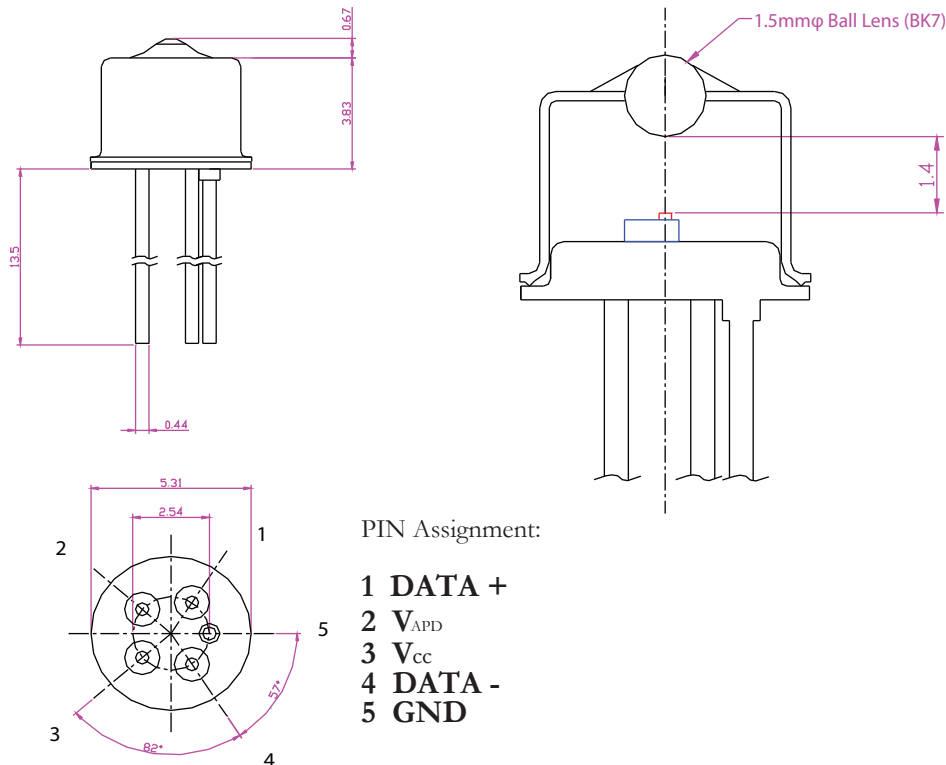
Parameter	Min.	Typ.	Max.
Power Supply (V)	3.0	3.3	3.6

### Absolute Maximum Rating

Parameter	Min.	Max.
APD Reverse Current (mA)		1
APD Forward Current (mA)		1
Supply Voltage (V)	-0.7	5.0
Maximum Input Power (mW)		1
Operating Temperature <sup>3)</sup> (°C)	-40	+85
Storage Temperature <sup>3)</sup> (°C)	-40	+85

3) Operational or storage beyond these absolute maximum ratings cause permanent damage to the device.

## Dimension:



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