

Features

- InGaAs/InP PIN Photodiode with transimpedance amplifier
- High sensitivity with AGC
- Differential ended output
- Single +3.3V operation
- -40 to 85°C operating temperature
- Integrated 4-pin TO-46 ball lens cap package
- 2.5 Gbps SDH/SONET reciever application
- 2.5 Gbps ATM receiver application

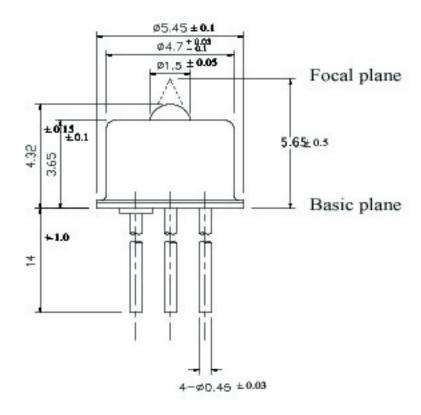
Absolute Maximum Rating (Tc=25°C)				
Parameter	Symbol	Min	Max	Unit
Supply Voltage	V _{cc}	-	3.8	V
Operating Temperature	T_{opr}	-40	+85	°C
Storage Temperature	$T_{ m stg}$	-40	+85	°C

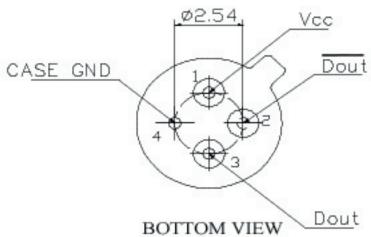
DC Electrical Characteristics(Tc=25°C)								
Parameter	Symbol	Min	Typical	Max	Unit			
Power Supply	Vcc	3.0	3.3	3.6	V			
Differential Output	V _d	-	0.6	-	V			
Supply Current (no load)	I_{cc}	-	26	38	mA			

Operating at $V_{cc} = 3.3V$, $T_c = 25$ °C, $\lambda = 1310$ nm, $9/125\mu m$ SM fiber

AC/Optical and Electrical Characteristics(Tc=25°C)								
Parameter	Symbol	Min	Typical	Max	Unit	Test Condition		
Detection Range	-	1100	1310	1650	nm	-		
Gain @ 10 Mbps, Differential	G	-	27	-	V/mW	λ=1310 nm		
Bandwidth	BW	1.7	1.9	-	GHz	-		
Saturation Power	P _{sat}	-3	0	-	dBm	λ=1310 nm		
Sensitivity	Sens	-	-21	-18	dBm	BER= 10 ⁻¹⁰ @ 2.5 Gbps, PRBS 2 ²³ -1		
Output Resistance	R _{out}	40	53	65	Ω	-		

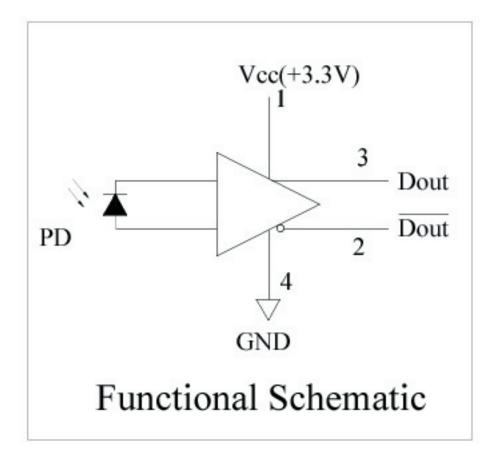
Package Diagram





TO-46 Package With Ball Lens Cap All Dimensions In mm

Functional schematic



Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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