

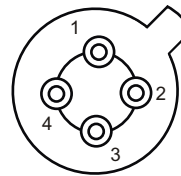
## PIN-TIA Receiver 1.25 Gbps

### Features of Diode

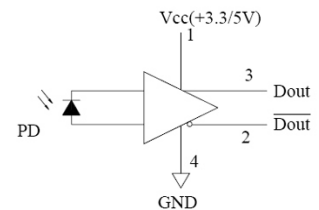
- InGaAs/InP PIN Photodiode with Transimpedance Amplifier
- High sensitivity with AGC
- Differential ended output
- Single 3.3 V/5 V operation
- -40 to 85 °C operating temperature
- Add the pin to monitor PD chip
- Integrated 4-pin TO-46 ball lens cap package
- 1.25 Gbps SDH/SONET/ATM receiver application



### PINOUT



Bottom view



Functional Schematic

### Absolute maximum ratings

Parameter	Min.	Max.
Storage temperature	-40 °C	85 °C
Operating temperature	-40 °C	85 °C
Supply voltage		6 V

Number	Function
1	V <sub>CC</sub>
2	$\overline{D}_{out}$
3	D <sub>out</sub>
4	GND

### Electrical-optical characteristics

Parameter Laser Diode	Test Condition	Min.	Typ.	Max.
Power supply	T <sub>c</sub> = 25 °C	3.0 V		5.5 V
Differential output voltage	T <sub>c</sub> = 25 °C	185 mV	250 mV	415 mV
Supply current	T <sub>c</sub> = 25 °C		26 mA	50 mA
Detection range	T <sub>c</sub> = 25 °C	1100 nm	1310 nm	1650 nm
Gain @ 10 Mbps Differential	Measure diff. with 30 μA <sub>p-p</sub> signal	1.92 V/mW	2.5 V/mW	3.4 V/mW
Bandwidth	T <sub>c</sub> = 25 °C	700 MHz	920 MHz	1100 MHz
Saturation power	BER < 10 <sup>-10</sup> @ 1.25 Gbps, Er=10 dB	-3 dBm	0 dBm	
Sensitivity	BER < 10 <sup>-10</sup> @ 1.25 Gbps, Er=10 dB		-26 dBm	-24 dBm
Output resistance	T <sub>c</sub> = 25 °C	48	50	62
Possible receptacle (type A)	ST1, ST2, ST4, P2, LC, SC, FC1, FC2, Fiberdip, SMA1, SMA2			

Compliant with RoHS-requirements (2002/95/EG vom 27.01.2003)

Note: The above product specifications are subject to change without notice.