

3.3V / 2.5 Gbps InGaAs PIN-TIA

PT-9130 Series

FEATURES

- ◇ InGaAs/InP PIN Photodiode with AGC transimpedance amplifier
- ◇ Differential ended output
- ◇ Single +3.3V operation
- ◇ Speed Up to 2.5 Gbps
- ◇ -40~+85 °C operation temperature

DESCRIPTION

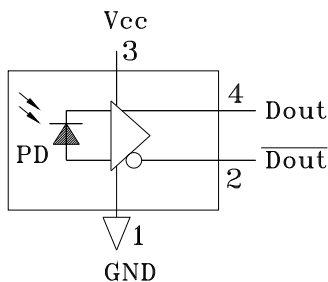
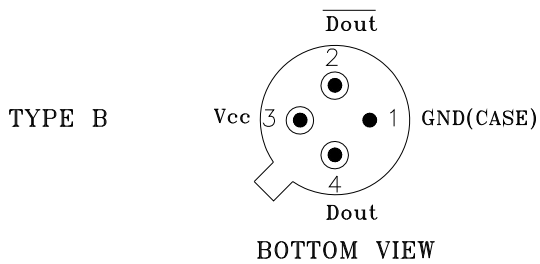
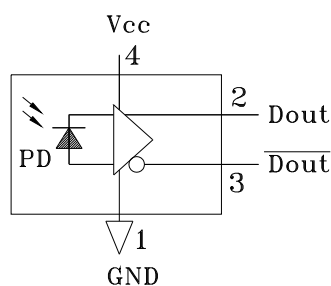
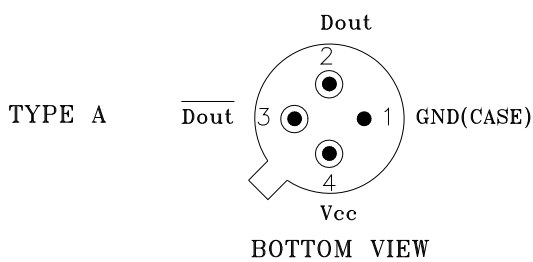
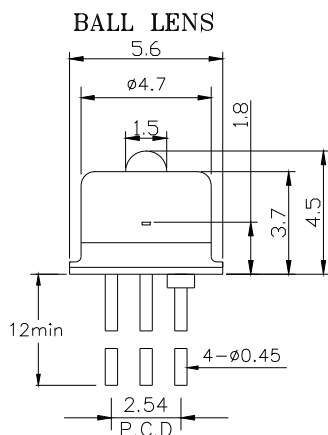
PT-9130 series is designed as optical receivers with transimpedance amplifier. Their wide dynamic ranges, differential outputs are suited for Datacom and Telecom applications, especially Gigabit Ethernet, Fiber Channel, and SONET OC-48/SDH STM-16.

AC / ELECTRICAL AND OPTICAL CHARACTERISTICS (T _C =25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Detection Range		1100	1310	1650	nm
	Active Area			75		μm
G	Differential Gain	AC coupled, Load=50 Ω	2	2.5	3	V/mW
BW	Bandwidth	-3 dB point	1.5	2	-	GHz
Psat	Saturation Power	λ =1300nm	-3	-	-	dBm
Sens	Sensitivity	BER=10 ⁻¹⁰ @2.5Gbps	-	-22	-19	dBm
Rout	Output Resistance		-	50	65	ohm
	Speed			2500		Mbps

DC / ELECTRICAL CHARACTERISTICS (T _C =25°C)					
Symbol	Parameter	Min.	Typ.	Max.	Unit
V _{CC}	Power Supply	3.1	3.3	3.5	V
I _{CC}	Supply Current (no load)	-	30	50	mA

ABSOLUTE MAXIMUM RATING (T _C =25 °C)			
Symbol	Parameter	Value	Unit
V	Voltage	4.5	V
T _{opr}	Operating Temperature	-40~+85	°C
T _{stg}	Storage Temperature	-40~+85	°C

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



Note: Specifications subject to change without notice.

ORDER INFORMATION

Part No.: P T - 9 1 0

Code	Voltage
0	5V
3	3.3V

Code	PIN Assignment
Blank	Type A
B	Type B

Revision History

Version	Subject	Release Date
1.0	Initial datasheet	2003/2/1
