3.3V / 1.31 mm / 1.25 Gbps InGaAs PIN-TIA Receiver PT-37130 Series

FEATURES

- InGaAs/InP PIN Photodiode with AGC transimpedance amplifier
- Differential ended output
- 1.31 μm high sensitivity, 1.55 μm high rejection
- Single +3.3V operation
- Speed Up to 1.25 Gbps
- - 40 ~ +85 ºC operation temperature

DESCRIPTION

PT-37130 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-24/SDH STM-8.

AC / ELECTRICAL AND OPTICAL CHARACTERISTICS (T_C=25°C)						
Symbol	**Parameter**	**Test Conditions**	**Min.**	**Typ.**	**Max.**	**Unit**
	Dectection Range		1260	1310	1360	nm*
	Avtive Area			75		μm
G	Differential Gain	AC coupled, load=50Ω	6	8	10	V/mW
BW	Bandwidth	-3 dB point	850			MHz
Psat	Saturation Power	λ=1300nm	-3			dBm
Sens	Sensitivity	BER=10^{-12} @1.25 Gb/s	-	-	-21	dBm
Rout	Output Resistance		-	50	65	ohm
	Speed			1250		Mbps

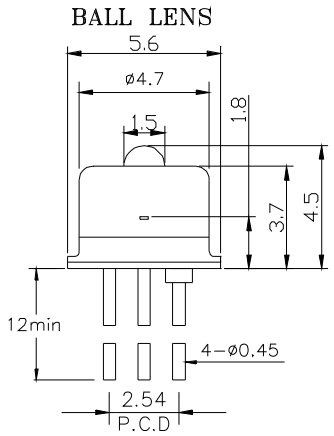
Note: *: At least 30 dB isolation for wavelength 1480 nm to 1600 nm

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	mA

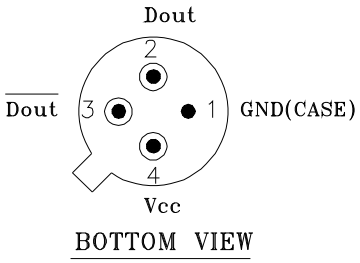
ABSOLUTE MAXIMUM RATING (T_C=25 ºC)			
Symbol	**Parameter**	**Value**	**Unit**
V	Voltage	4.5	V
T_{opr}	Operating Temperature	-40~+85	ºC
T_{stg}	Storage Temperature	-40~+85	ºC

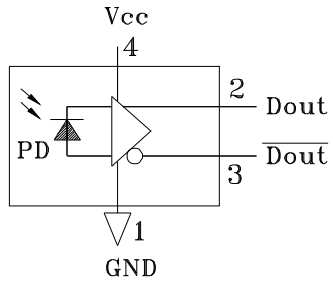
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MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT

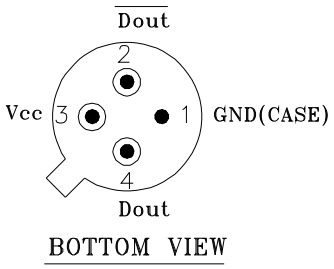


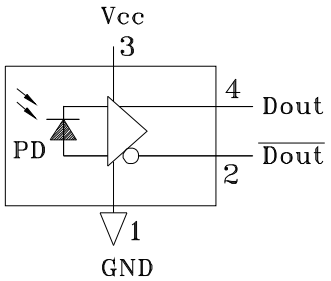
TYPE A





TYPE B





Note: Specifications subject to change without notice.

ORDER INFORMATION

Part No.: P T - 3 7 1 3 0 □

Code	Wavelength
Blank	1310/1550 nm
3	1310 nm
5	1550 nm

Code	PIN Assignment
Blank	Type A
B	Type B