

## 5V / 155 Mbps InGaAs PIN-TIA Receiver

## PT-3500 Series

InGaAs PIN-TIA WITH RECEPTACLE

### FEATURES

- ◇ InGaAs/InP PIN Photodiode with AGC transimpedance amplifier
- ◇ Differential ended output
- ◇ Single +5V operation
- ◇ - 40 ~ +85 °C operation temperature

### DESCRIPTION

PT-3500 series are designed as optical signal receivers with AGC transimpedance amplifier. Their wide dynamic ranges, differential outputs are suited for telecommunications, especially SONET OC-3 / SDH STM-1, Fast Ethernet, and Fiber Channel.

AC / ELECTRICAL AND OPTICAL CHARACTERISTICS (T <sub>c</sub> =25°C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
	Detection Range		1100	1310	1650	nm
G	<a href="#">Gain@10Mbps</a> Differential	λ =1300nm	0.17	-	220	V/mW
BW	Bandwidth	P <sub>f</sub> =1 μW	120	140		MHz
Psat	Saturation Power	λ =1300nm	-3	0	-	dBm
Sens	Sensitivity	BER=10 <sup>-10</sup> @155Mbps	-	-38	-36	dBm
Rout	Output Resistance		-	50	65	ohm
	Operation Speed			155	170	Mbps

DC / ELECTRICAL CHARACTERISTICS (T <sub>c</sub> =25°C)					
Symbol	Parameter	Min.	Typ.	Max.	Unit
V <sub>CC</sub>	Power Supply	4.5	5	5.5	V
I <sub>CC</sub>	Supply Current (no load)	-	-	35	mA

ABSOLUTE MAXIMUM RATING (T <sub>c</sub> =25 °C)			
Symbol	Parameter	Value	Unit
V	Voltage	6	V
T <sub>opr</sub>	Operating Temperature	-40~+85	°C
T <sub>stg</sub>	Storage Temperature	-40~+85	°C

### MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT

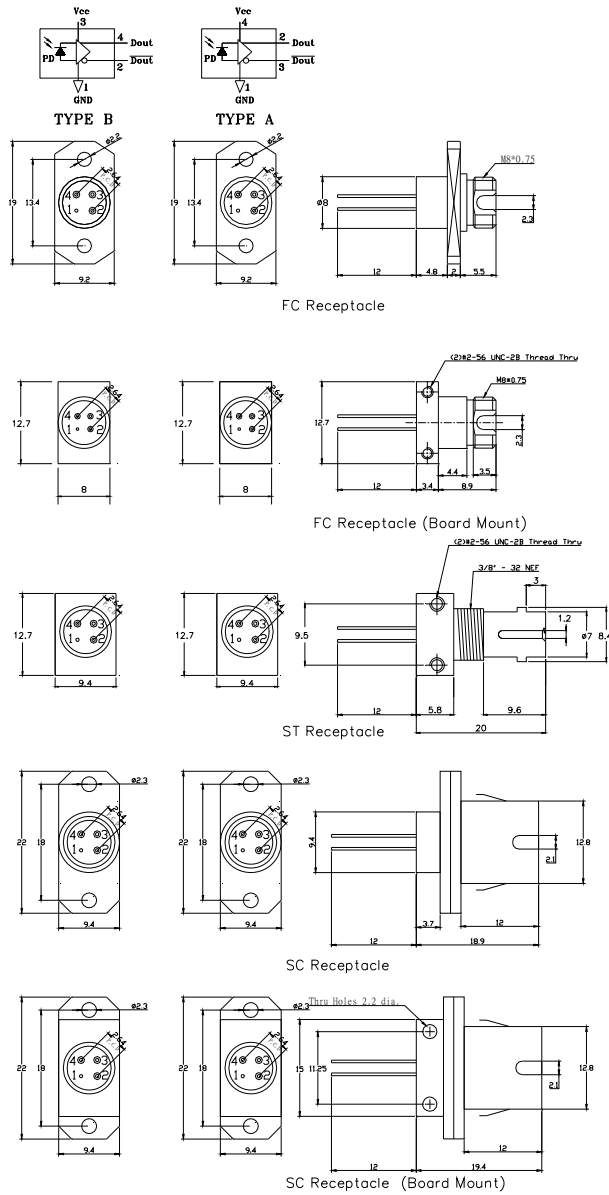
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Note: Specifications subject to change without notice.



## ORDER INFORMATION

Part No.: P T - 3 5  0  -

Code	Voltage
0	+5V
3	+3.3V

Code	PIN Assignment
Blank	Type A
B	Type B

Code	Connector Type
F	FC/PC
FB	FC/PC (Board Mount)
T	ST/PC
S	SC/PC
SB	SC/PC (Board Mount)

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## Revision History

Version	Subject	Release Date
1.0	Initial datasheet	2002/5/18

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