

3.3V / 2.5 Gbps InGaAs PIN-TIA Receiver

PT-9530

InGaAs PIN-TIA WITH RECEPTACLE

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

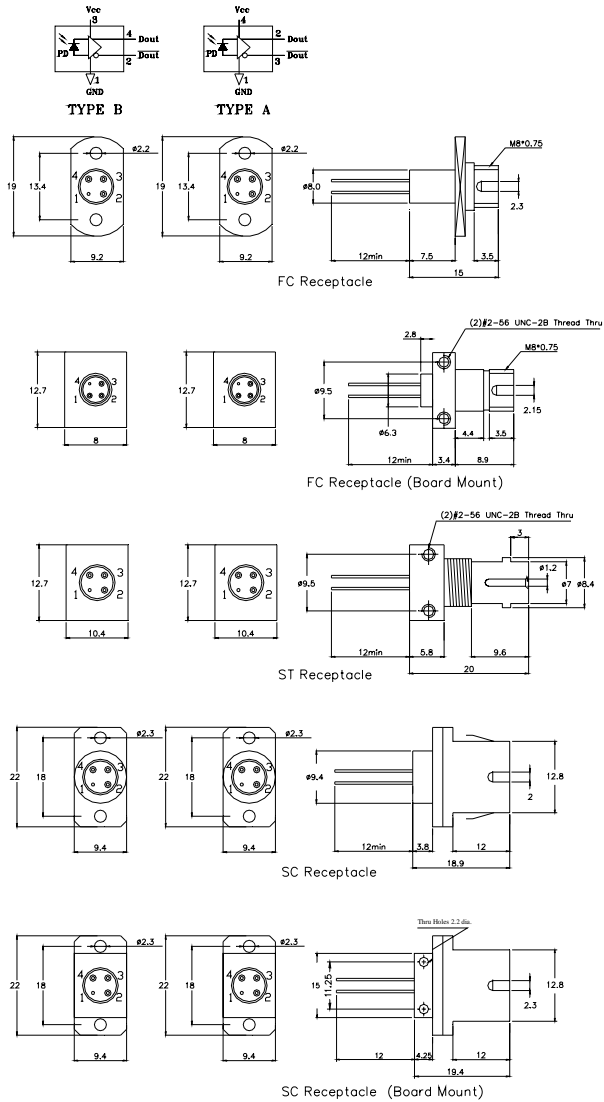
PT-9530 series are designed as optical signal receivers with AGC transimpedance amplifier. Their wide dynamic ranges, differential outputs are suited for telecommunications, especially Gigabit Ethernet, Fiber Channel and SONET OC-48.

| AC / ELECTRICAL AND OPTICAL CHARACTERISTICS (T _C =25°C) | | | | | | |
|--|-------------------|---------------------------------|------|------|------|------|
| Symbol | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
| | Detection Range | | 1100 | 1310 | 1650 | nm |
| 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 @2.5 Gb/s | | -21 | -19 | dBm |
| Rout | Output Resistance | | - | 50 | 65 | ohm |
| | Operation Speed | | | 2500 | | Mbps |

| DC / ELECTRICAL CHARACTERISTICS (T _C =25°C) | | | | | |
|--|--------------------------|------|------|------|------|
| Symbol | Parameter | Min. | Typ. | Max. | Unit |
| V _{CC} | Power Supply | 3.15 | 3.3 | 3.45 | V |
| I _{CC} | Supply Current (no load) | - | - | 40 | 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 5 3 0 [] - [] []

| Code | Voltage | Code | PIN Assignment | Code | Connector Type |
|------|---------|-------|----------------|------|---------------------|
| 0 | 5V | Blank | Type A | F | FC/PC |
| 3 | 3.3V | B | Type B | FB | FC/PC (Board Mount) |
| | | | | T | ST/PC |
| | | | | S | SC/PC |
| | | | | SB | SC/PC (Board Mount) |