

T-11-1250-P3-SXX/APC-X-XX



Features

- InGaAs/InP PIN Photodiode with transimpedance amplifier
- High sensitivity with AGC*
- Differential ended output
- Single +3.3V operation
- -40~85°C operating temperature

Packaging

- SM fiber pigtailed with optional SFC/APC and SSC/APC connector

Application

- 1.25Gbps SDH/SONET/ATM receivers
- RoHS Compliant available

Absolute Maximum Ratings (Tc=25°C)

| Parameter | Symbol | Value | Unit |
|-----------------------|------------------|----------|------|
| Supply Voltage | V _{CC} | 4.5 | V |
| Operating Temperature | T _{opr} | -40 ~ 85 | °C |
| Storage Temperature | T _{stg} | -40 ~ 85 | °C |

DC Electrical Characteristics (Tc=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|-----------------------------|-----------------|------|------|------|------|
| Power Supply | V _{CC} | 3.0 | 3.3 | 3.6 | V |
| Differential Output Voltage | V _d | 185 | 250 | 415 | mV |
| Supply Current (no load) | I _{cc} | - | 26 | 50 | mA |

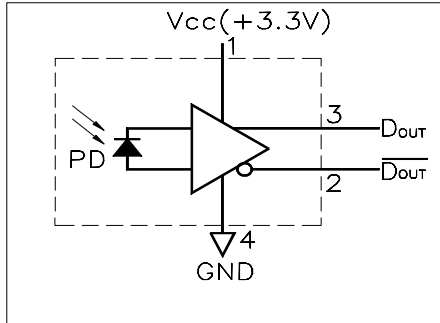
(Operating at V_{CC}=3.3V, Tc=25°C, λ=1310nm, 9/125µm SM fiber)

AC/Optical and Electrical Characteristics (Tc=25°C)

| Parameter | Symbol | Min | Typ | Max | Unit | Test Conditions |
|---------------------------|------------------|------|------|------|------|--|
| Detection Range | | 1100 | 1310 | 1650 | nm | |
| Gain@10Mbps Differential | G | 1.92 | 2.5 | 3.4 | V/mW | Measure differentially with 30uAp-p signal |
| Bandwidth (to -3dB point) | BW | 700 | 920 | 1100 | MHz | |
| Saturation Power | P _{sat} | -3 | 0 | - | dBm | BER<10 ⁻¹² @1.25Gbps, PRBS2 ⁷ -1 Er=10dB |
| Sensitivity | Sens. | - | -26 | -23 | dBm | BER<10 ⁻¹² @1.25Gbps, PRBS2 ⁷ -1 Er=10dB |
| Output Resistance | R _{out} | 48 | 50 | 62 | ohm | |

**Note: 1.Pin assignment can be customized.
2.Specifications subject to change without**

Pin Assignment



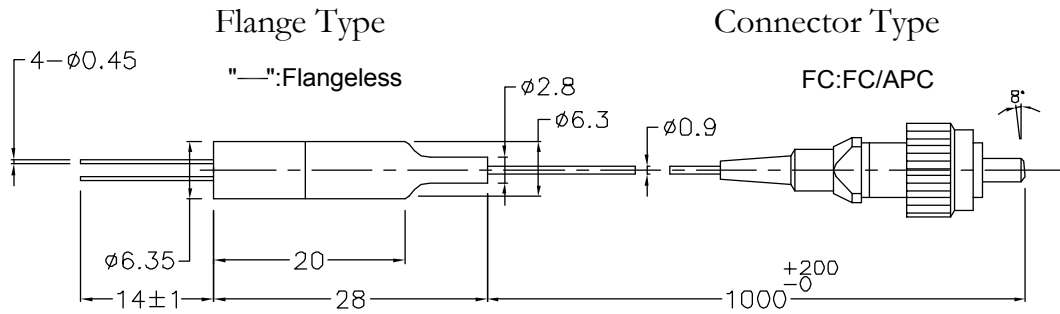
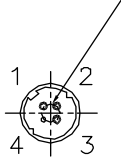
Pin assignment

- 1~Vcc
- 2~ \overline{Dout}
- 3~Dout
- 4~GND(CASE)

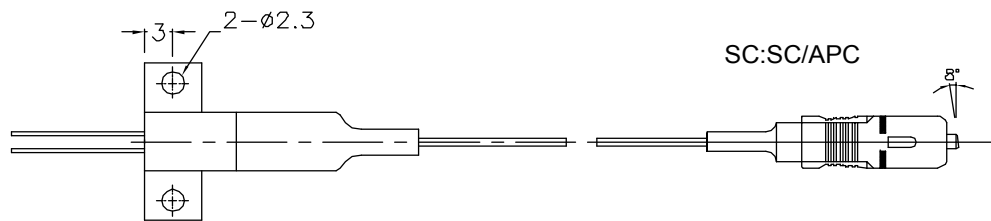
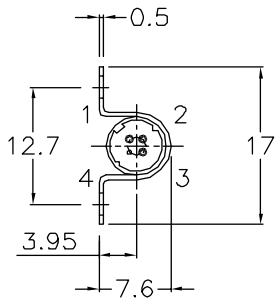
Packaging Dimension

Units in mm.

P.C.D. 2.0±0.5



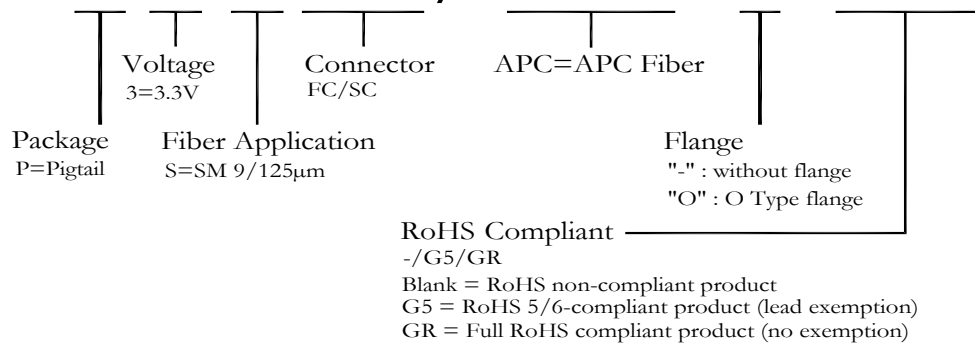
"O":Horizontal (Omega Housing)



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Ordering Information

T-11-1250-P3-SXX/APC-X-XX



Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.
Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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