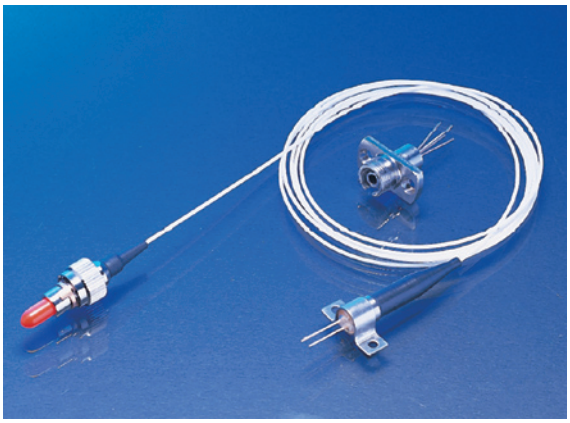
Luminent
Bringing Communications to Light™

1.25Gbps PIN-TIA Receiver Modules- Receptacle & Pigtailed (3.3V)

T-11-1250-P3/R3-XXX



Features

- InGaAs/InP PIN Photodiode with transimpedance amplifier
- High sensitivity with AGC*
- Differential ended output
- Single+3.3V operation
- -40 to 85°C operating temperature
- FC/ST/SC receptacle package
- SM/MM fiber pigtailed with optional FC/ST/SC connector
- 1.25Gbps SDH/SONET/ATM receivers application

Absolute Maximum Rating (Tc=25°C)

Parameter	Symbol	Value	Unit
Supply Voltage	V_{CC}	4.5	V
Operating Temperature	T_{opr}	-40 to +85	°C
Storage Temperature	T_{stg}	-40 to +85	°C

DC Electrical Characteristics(Tc=25°C)

Parameter	Symbol	Min	Typical	Max	Unit
Power Supply	V_{CC}	3.0	3.3	3.6	V
Differential Output Voltage	V_d	-0.1	-	0.1	V
Supply Current (no load)	I_{CC}	-	34	47	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	Typical	Max	Unit	Test Condition
Detection Range		1100	1310	1650	nm	-
Differential small-signal transimpedance	R_{tr}	6.6	-	-	kΩ	Measure differentlly AC couple RL=50Ω
Bandwidth (to -3dB point)	BW	850	1000	-	MHz	-
Saturation Power	P_{sat}	-3	0	-	dBm	λ=1310nm
Sensitivity	Sens	-	-23	-22	dBm	BER=10^{-10} @1.24416Gbps, PRBS7
Output Resistance	R_{out}	40	50	62	ohm	-

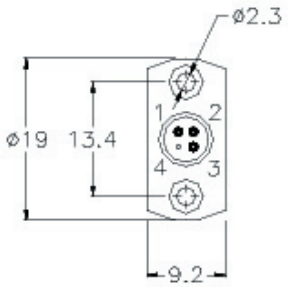
Connector Options

Model	Package	Fiber	Connector
T-11-1250-R3-SFC T-11-1250-R3-SST T-11-1250-R3-SSC	Receptacle	-	FC ST SC
T-11-1250-P3-S(M)FC T-11-1250-P3-S(M)ST T-11-1250-P3-S(M)SC T-11-1250-P3-S(M)	Pigtailed	SM (MM)	FC ST SC -

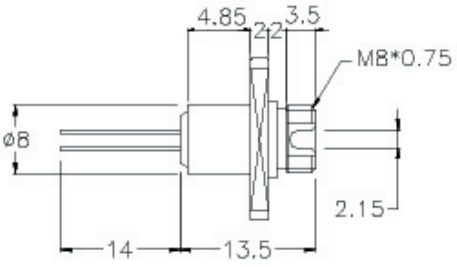
Outline Drawing-Receptacle

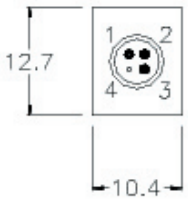
PIN-TIA Receiver Modules-Receptacle

Units in mm

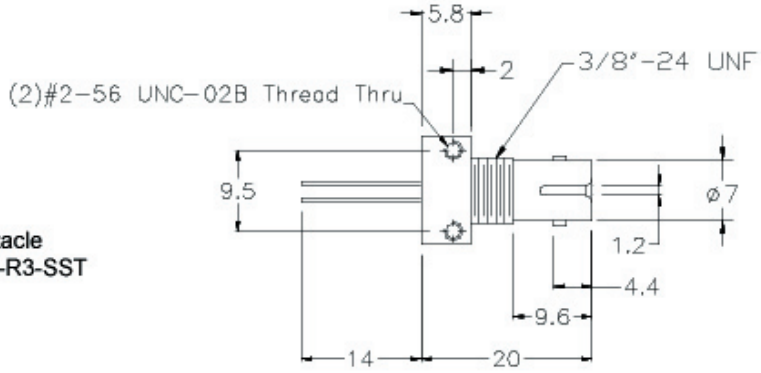


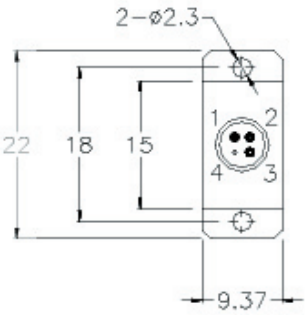
FC Receptacle
T-11-1250-R3-SFC



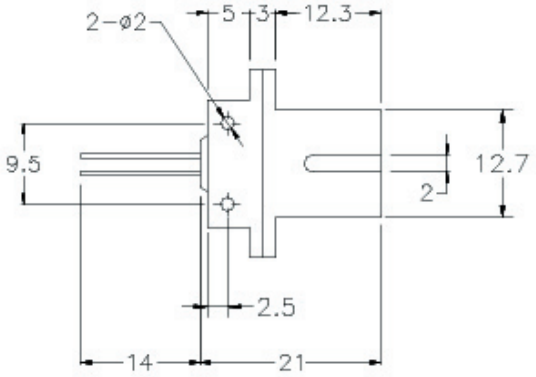


ST Receptacle
T-11-1250-R3-SST





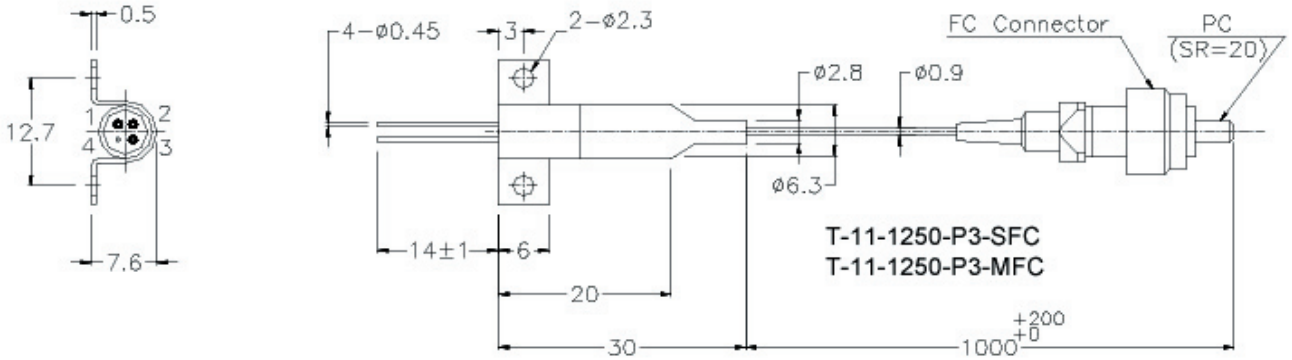
SC Receptacle
T-11-1250-R3-SSC

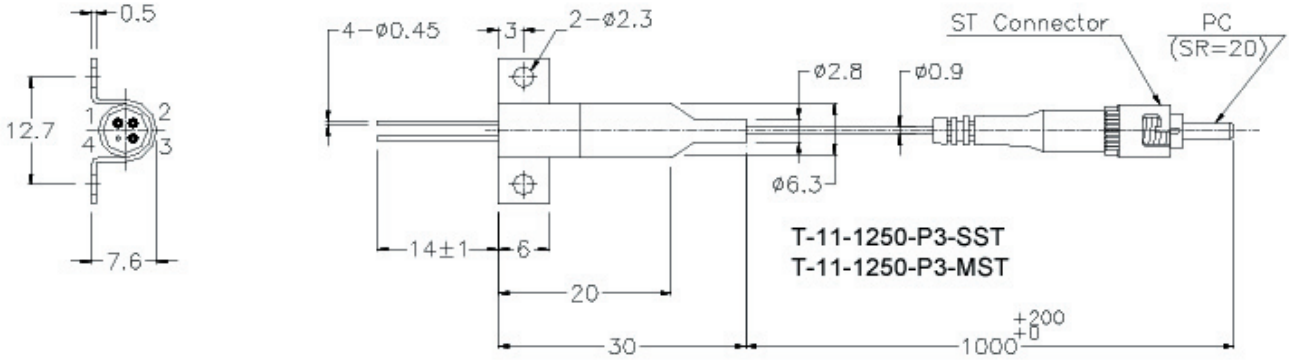


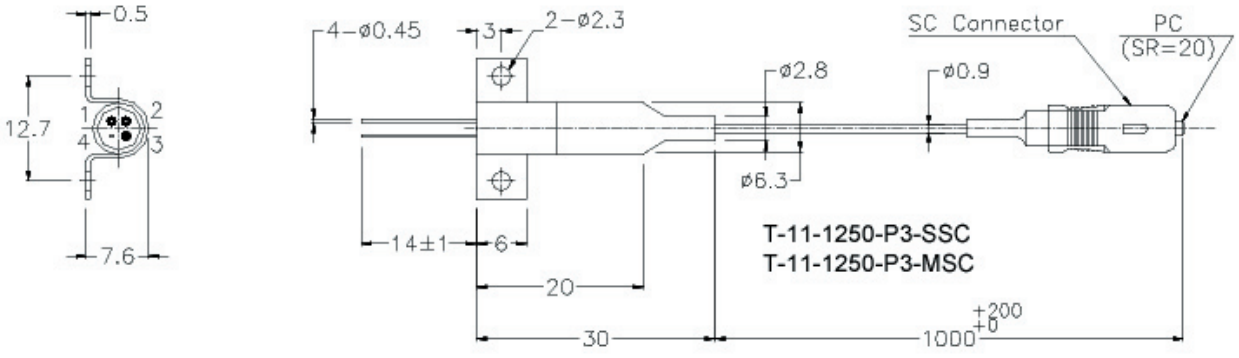
Outline Drawing-Pigtailed

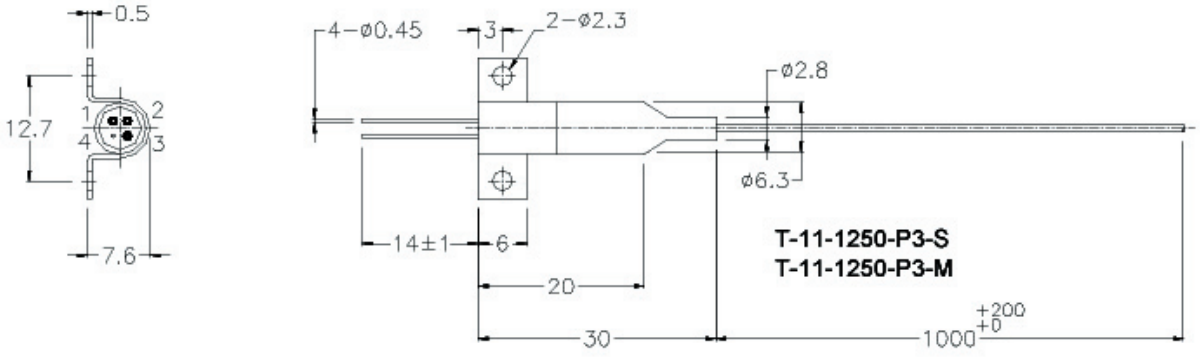
PIN-TIA Receiver Modules-Pigtailed

Units in mm

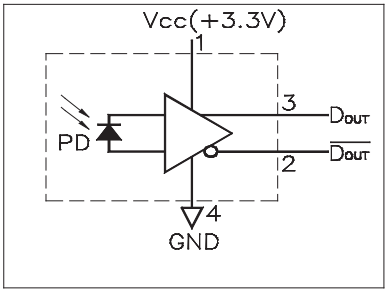








Pin Assignment



Pin assignment
1~Vcc
2~$\overline{\text{Dout}}$
3~Dout
4~GND (CASE)

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.

Legal Notice