



#### **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 <sub>cc</sub>	4.5	V
Operating Temperature	T <sub>opr</sub>	-40 to +85	°C
Storage Temperature	T <sub>sta</sub>	-40 to +85	°C

DC Electrical Characteristics( Tc=2					
Parameter	Symbol	Min	Typical	Max	Unit
Power Supply	V <sub>cc</sub>	3.0	3.3	3.6	V
Differential Output Voltage	Vd	-0.1	-	0.1	V
Supply Current (no load)	I <sub>cc</sub>	-	34	47	mA

(Operating at  $V_{cc}$ =3.3V, Tc=25°C,  $\lambda$ =1310nm, 9/125 $\mu$ m SM fiber)

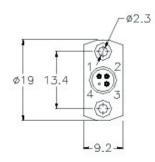
AC/Optical and Electrical Characteristics( Tc=25°C )						
Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Detection Range		1100	1310	1650	nm	-
Differential small-signal transimpedance	R <sub>tr</sub>	6.6	-	-	kΩ	Measure differentlly AC couple RL= $50\Omega$
Bandwidth (to -3dB point)	BW	850	1000	-	MHz	-
Saturation Power	P <sub>sat</sub>	-3	0	-	dBm	λ=1310nm
Sensitivity	Sens	-	-23	-22	dBm	BER=10 <sup>-10</sup> @1.24416Gbps, PRBS7
Output Resistance	R <sub>out</sub>	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 -

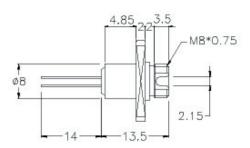
## Outline Drawing-Receptacle

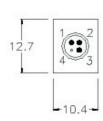
### **PIN-TIA Receiver Modules-Receptacle**

Units in mm

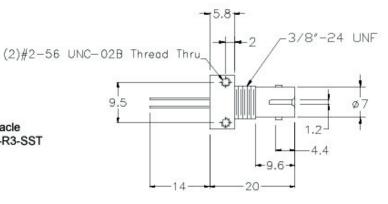


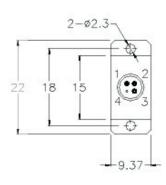
FC Receptacle T-11-1250-R3-SFC



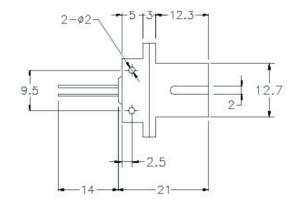


ST Receptacle T-11-1250-R3-SST





SC Receptacle T-11-1250-R3-SSC

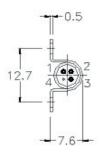


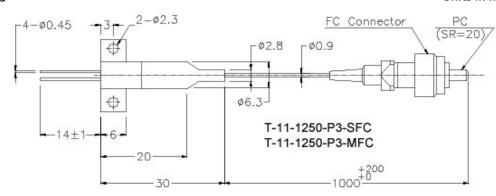


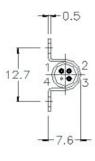
## Outline Drawing-Pigtailed

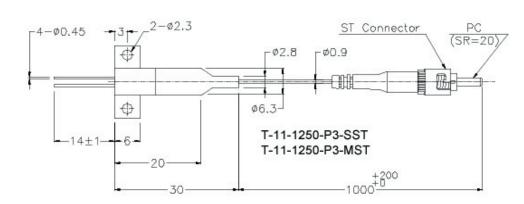
### **PIN-TIA Receiver Modules-Pigtailed**

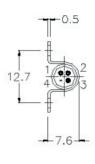


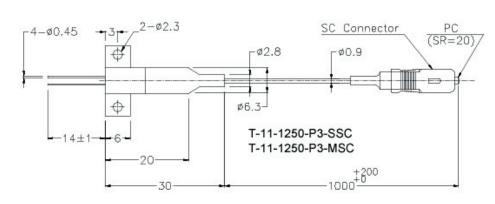


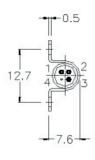


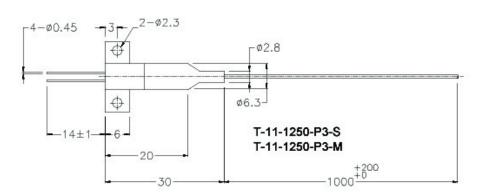




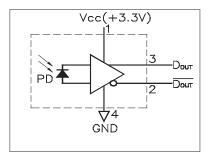








#### Pin Assignment



## Pin assignment

- 1∼Vcc
- 2~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.

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