1.25Gbps PIN-TIA Receiver Module-Receptacle (5pin-out, 3.3V)

T-11-1250M-R3-XXX-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
- FC/ST/SC receptacle packaged

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 Ouptput 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, 50/125μm MM fiber)

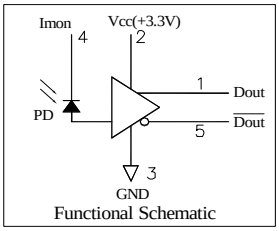
AC/Optical and Electrical Characteristics (Tc=25°C)

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, PRBS 2^7-1, Er=10dB
Sensitivity	Sens	-	-26	-23	dBm	BER<10^{-12}@1.25Gbps, PRBS 2^7-1, Er=10dB
Output Resistance	Rout	48	50	62	ohm	-

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

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9F, No 81, Shui Lee Rd. • Hsinchu, Taiwan, R.O.C. • tel: 886.3.5169222 • fax: 886.3.5169213
LUMNDS1555-APR1106
rev. A.0

Pin Assignment



Functional Schematic

Pin Assignment

1~Dout

2~Vcc

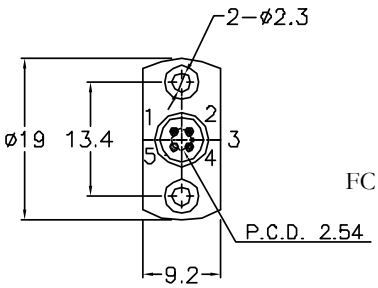
3~GND(CASE)

4~Imon

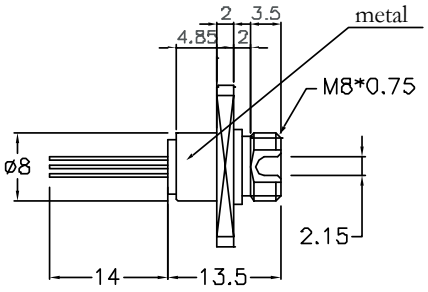
5~$\overline{\text{Dout}}$

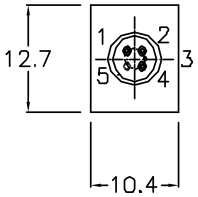
Packaging Dimension Units in mm.

Part Number: T-11-1250M-R3-XXX-XX

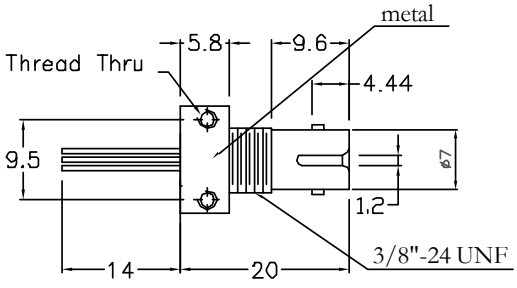


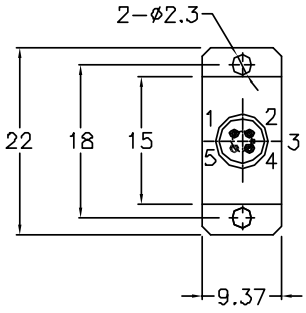
FC Receptacle



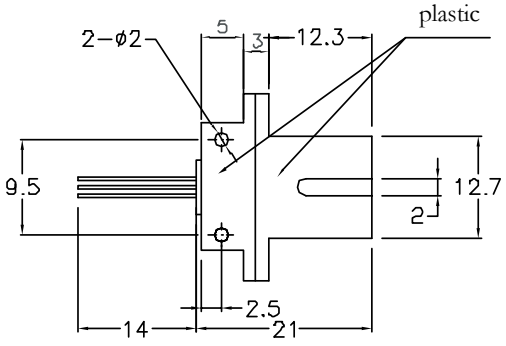


ST Receptacle



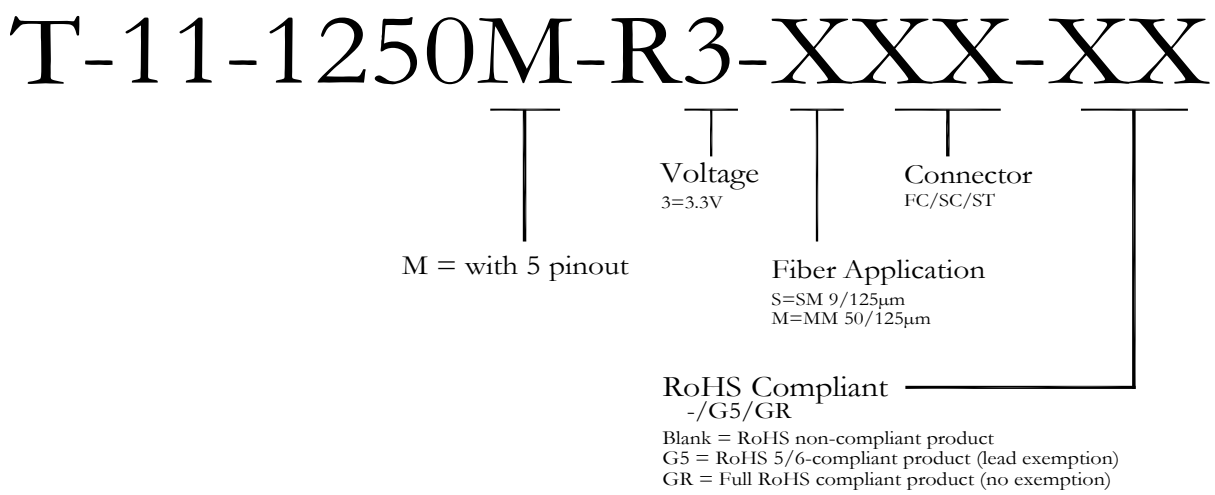


SC Receptacle



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Ordering Information



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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