

T-11-2500-D3-SXX



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
- SC/LC/MU ROSA package
- 2.5Gbps SONET/SDH receivers application
- 2.5Gbps ATM receiver application

Absolute Maximum Rating (Tc=25°C)

Parameter	Symbol	Value	Unit
Supply Voltage	V_{CC}	3.8	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	-	0.6	-	V
Supply Current (no load)	I_{CC}	-	26	38	mA

(Operating at $V_{CC}=3.3V$, $T_c=25^\circ C$, $\lambda=1310nm$, 9/125 μm SM fiber)

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

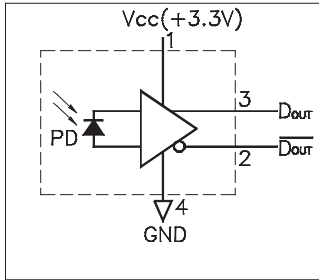
Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Detection Range		1100	1310	1650	nm	-
Gain @ 10 Mbps Differential	G	-	27	-	V/mW	$\lambda=1310nm$
Bandwidth	BW	1.7	1.9	-	GHz	-
Saturation Power	P_{sat}	-3	0	-	dBm	$\lambda=1310nm$
Sensitivity	Sens	-	-21	-20	dBm	BER= 10^{-10} @ 2.48832Gbps, PRBS23
Output Resistance	R_{out}	40	53	65	ohm	-
Low frequency cutoff	-	-	100	-	KHz	Measured at AC coupled via 22nF Capacitor into 50 ohm load
Optical Return Loss	ORL	27	-	-	dB	-

Connector Options

Model	Package	Fiber	Connector
T-11-2500-D3-SSC	ROSA	-	FC
T-11-2500-D3-SLC	ROSA	-	LC
T-11-2500-D3-SMU	ROSA	-	MU

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Pin Assignment



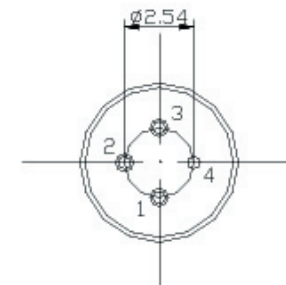
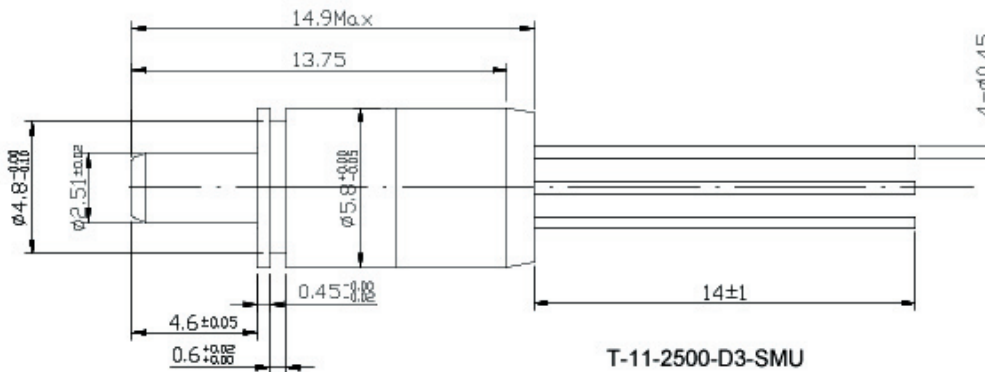
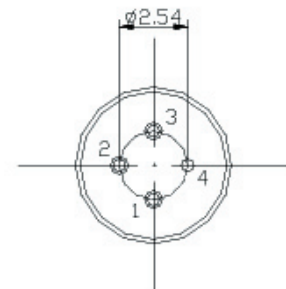
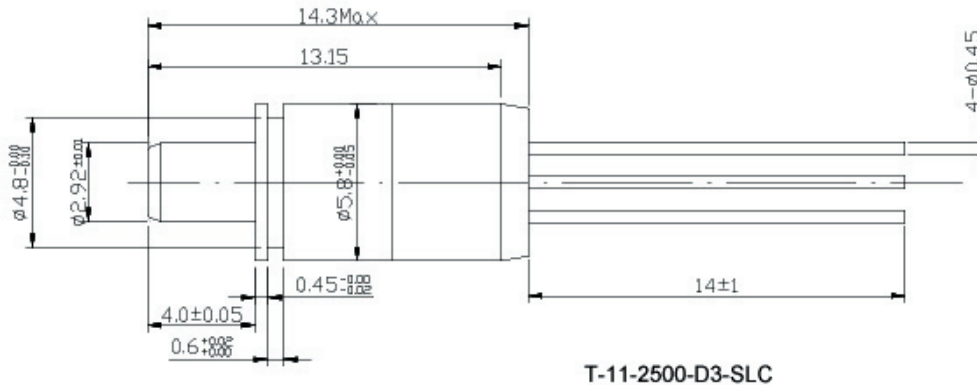
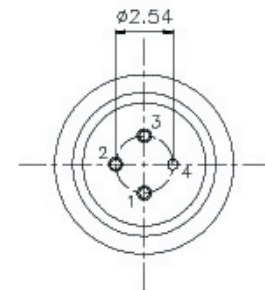
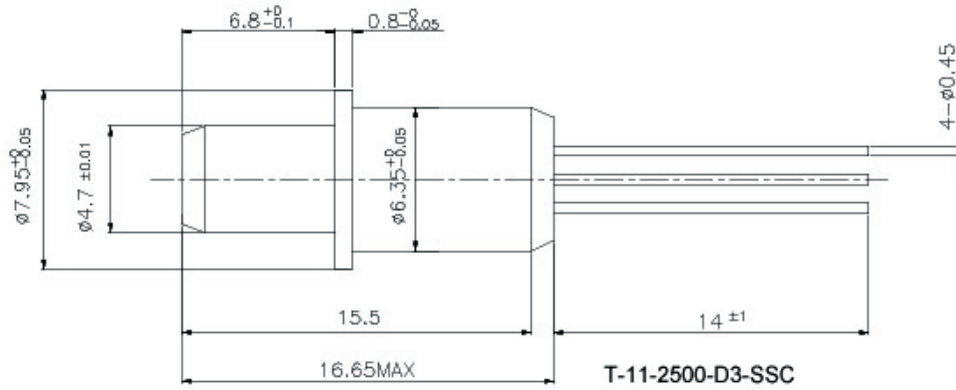
Pin assignment

- 1~Vcc
- 2~Dout
- 3~Dout
- 4~GND(CASE)

Outline Drawing-ROSA

2.5Gbps PIN-TIA Receiver Modules-ROSA (3.3V)

Units in mm



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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