

## T-11-2500-D-Sxx



### Features

- InGaAs/InP PIN Photodiode with transimpedance amplifier
- High sensitivity with AGC
- Differential ended output
- Single +5V operation
- -40 to 85°C operating temperature
- SC/LC/MU ROSA Package
- 2.5 Gbps SONET/SDH receiver application
- 2.5 Gbps ATM receiver application

### Absolute Maximum Rating (Tc=25°C)

Parameter	Symbol	Min	Max	Unit
Supply Voltage	V <sub>CC</sub>	-	6	V
Operating Temperature	T <sub>opr</sub>	-40	+85	°C
Storage Temperature	T <sub>stg</sub>	-40	+85	°C

### DC Electrical Characteristics(Tc=25°C)

Parameter	Symbol	Min	Typical	Max	Unit
Power Supply	V <sub>CC</sub>	4.5	5.0	5.5	V
Differential Output Voltage	V <sub>d</sub>	0.22	0.38	0.57	V
Supply Current (no load)	I <sub>CC</sub>	-	34	63	mA

(Operating at V<sub>CC</sub>=5V, T<sub>c</sub>=25°C, λ=1310nm, 9/125 μm SM fiber)

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

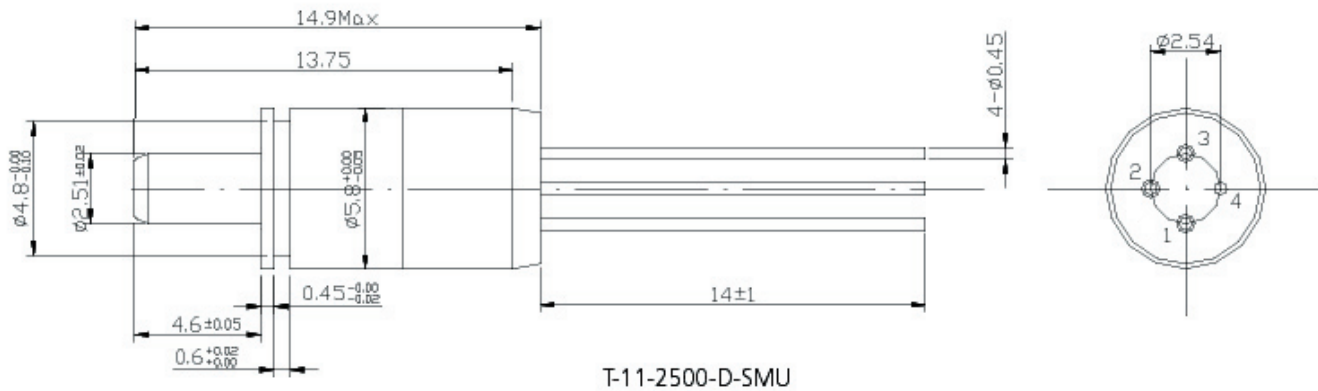
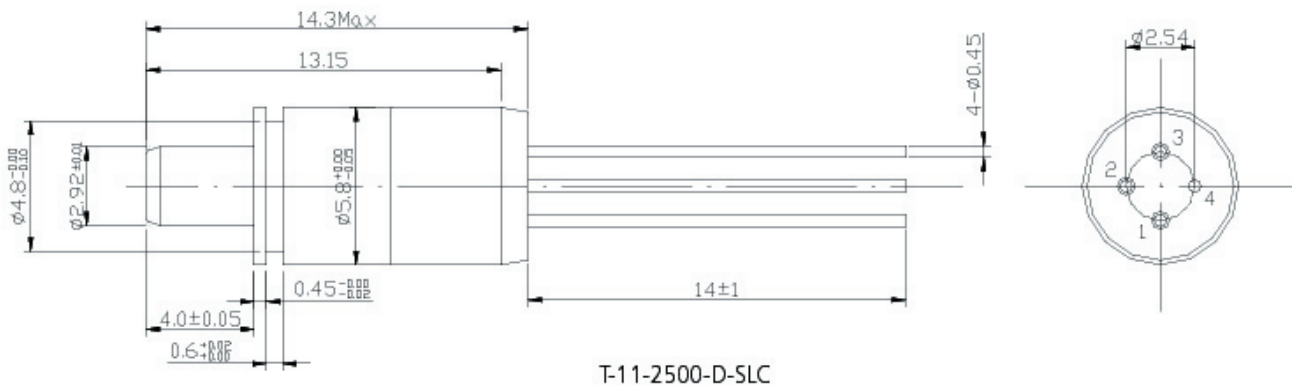
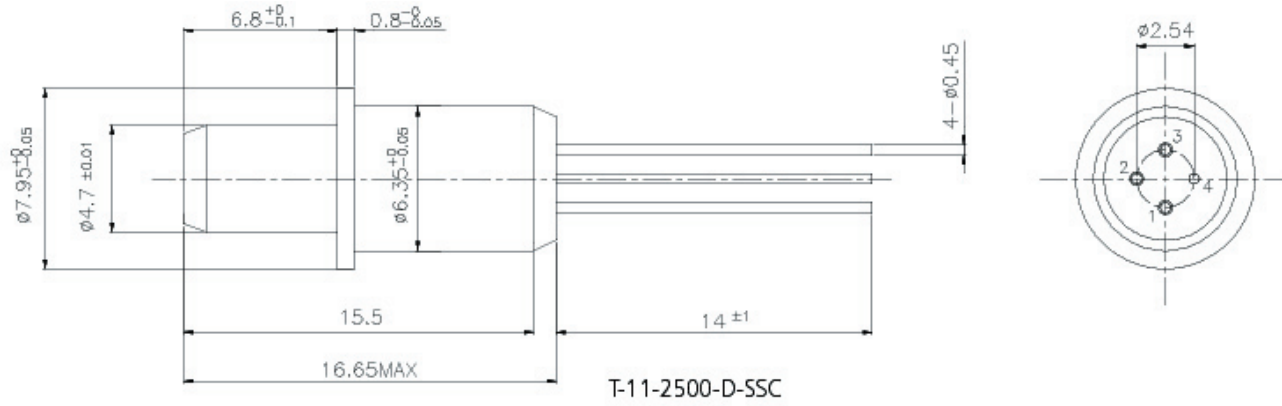
Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Detection Range	-	1100	1310	1650	nm	
Gain @ 10 Mbps Differential	G	1.5	2.3	3.2	V/mW	Measure differentially AC coupled RL = 50 Ω
Bandwidth (to -3dB point)	BW	1500	2000	-	MHz	
Saturation Power	P <sub>sat</sub>	-3	0	-	dBm	BER= 10 <sup>-10</sup> @ 2.5 Gbps, PRBS 23
Sensitivity	Sens	-	-21	-18	dBm	BER= 10 <sup>-10</sup> @ 2.5 Gbps, PRBS 23
Output Resistance	R <sub>out</sub>	40	50	52	Ω	
Optical Return Loss	ORL	27	-	-	dB	

### Connector Options

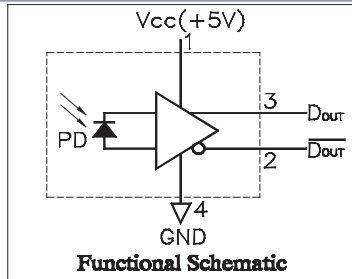
Parameter	Symbol	Min	Typical
T-11-2500-D-SSC	ROSA	-	SC
T-11-2500-D-SLC	ROSA	-	LC
T-11-2500-D-SMU	ROSA	-	MU

## T-11-2500-D-Sxx

### Package Diagram



## Pin assignment



## Pin assignment

- 1~Vcc
- 2~ $\overline{Dout}$
- 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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