

155Mbps Receiver Optical Sub Assembly (ROSA)

REV. A/03/2003

InGaAs PIN-TIA ROSA (Receiver Optical Sub Assembly)



Features

- **Data Rate: Upto 155Mbps**
- **InGaAs/InP-PIN Photodiode with Trans-impedance Amplifier assembled in a TO-46 package**
- **High V/mW gain**
- **Single +3.3V or +5V operation**
- **Operating case temperature: -20 °C to +85 °C**
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Applications

- Optical communication system, 10/100Base Ethernet Applications, ATM/SONET

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Storage Temperature	T_{stg}	-40 ~ +100	°C
Operating Case Temperature	T_{op}	-20 ~ +85	°C
Supply Voltage	V_{cc}	3.6 5.5	V

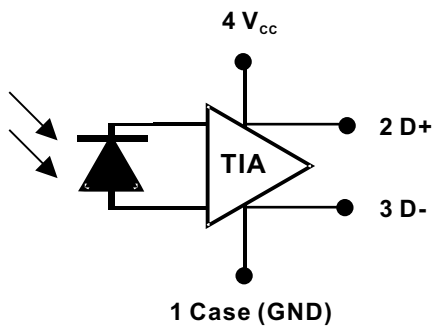
Specifications

Optical/Electrical Characteristics(CW@ T=25°C)

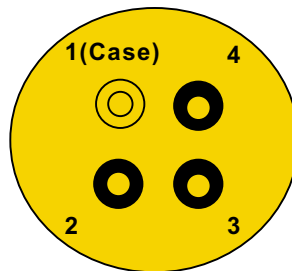
Parameter	Symbol	Values			Test Condition	Unit
		Min.	Typ.	Max.		
Spectral Range		1100		1600		nm
Power Supply	V_{cc}	3.14 4.75	3.3 5.0	3.47 5.25		V
Optical Sensitivity	P_s			-33	$\lambda=1310nm,$ $BER=1 \times 10^{-10}$	dBm
BandWidth	BW		125		-3dB, 50Ω	MHz
Low Frequency Cutoff	LF		100			KHz
Output Impedance	R_o	40	50	65		Ω
Output offset Voltage	V_{os}	1.0	1.8	2.6		V

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Pin Number/Description



1) Pin Number



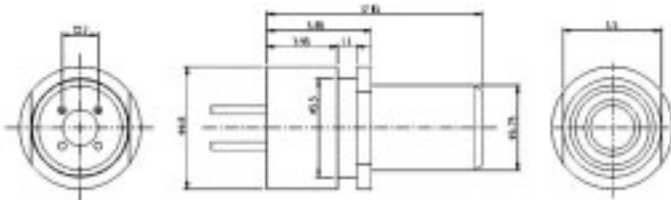
2) Bottom view

1.GND (Case)
2.Dout +
3.Dout -
4.V _{cc}

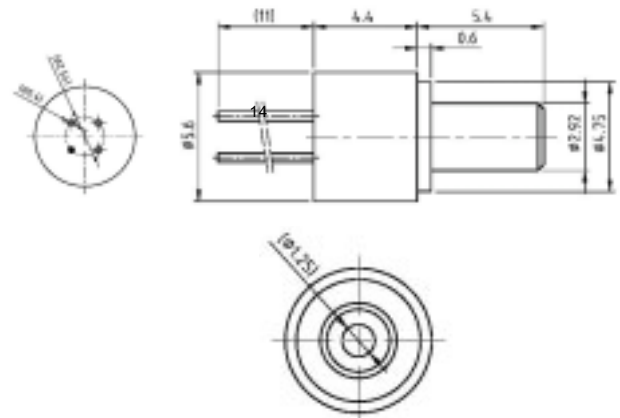
3) Description

Receptacle Dimension in mm

1) SC Receptacle Dimension



2) LC Receptacle Dimension



Ordering Information

19110-0002-0: SC, 155Mbps ROSA, 3.3V

19120-0001-3: SC, 155Mbps ROSA, 5.0V

19110-0010-1: LC, 155Mbps ROSA, 3.3V