SC-ROSAXX31XXX

155Mbps PIN-TIA Receiver with Receptacle Modules

Features

- High sensitivity
- Differential ended output
- Single +3.3V operation
- Single +5V operation
- Supports 3.3V and 5V applications
- Trans-impedance amplifier with AGC
- RoHS Compliant Products Available

Applications

- 100/155Mbps application
- SDH/SONET application

General

SC-ROSAXX313XXX Series is a 4 pin or 5 pin PIN-TIA with Receptacle operating on 155Mbps. It provides high sensitivity with AGC, 100ohm differential outputs PIN-TIA provides a monitor pin. A split sleeve for the optical connector is jointed with Ø2.5mm ferrule.

Ordering Information (Standard version *Note1)

Part No.	Insulation	Voltage (V)	Pin Type	Ferrule sets of type
SC-ROSA53130B	NO	3.3	A	Ceramic sleeve
SC-ROSA6J3150W	YES	5	A	No ceramic sleeve
SC-ROSA5310DW	NO	3.3/5	D	No ceramic sleeve
SC-ROSA6J313DB	YES	3.3	D	Ceramic sleeve

*Note1: For more ordering information, please refer the nomenclature and contact EPOTOLINK sales.

Absolute maximum ratings

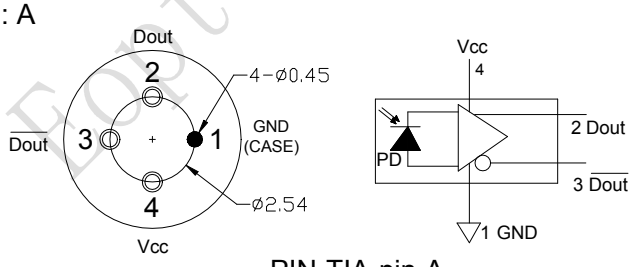
Parameter	Min	Typ.	Max	Unit
Storage Temperature	-40	25	85	℃
Operating Temperature	-40	25	85	℃
TIA Supply Voltage	3.1	3.3	5	V
Operation Relative Humidity	-		85	%
Soldering Temperature / Time	-		260/10	°C/S

Electrical and optical characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Wavelength	λ	1270		1620	nm	
Supply Current	Icc		30	40	mA	No Loads
Saturation Power	Psat	-3	0	-	dBm	@ 1310nm
Small-Signal Bandwidth	BW	110	140		MHz	
Low-Frequency Cut off	LF			5	kHz	
Sensitivity			-37	-35	dBm	1300nm,155Mbps, BER=10-10@ PRBS= 223-1
Single Ended Output Impedance	R		50		Ω	
Rise /FallTime	T			4.5	ns	10～90%

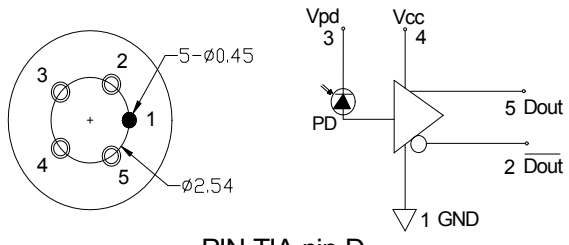
Pin Assignment Note2

TYPE: A



PIN-TIA-pin-A

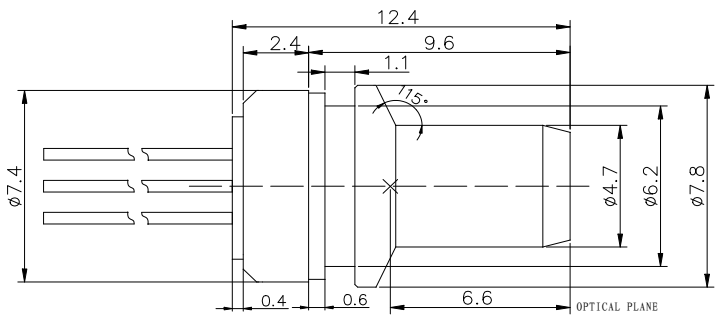
TYPE: D



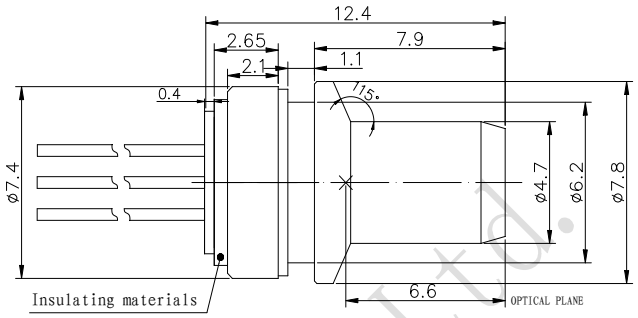
PIN-TIA-pin-D

Note2: Other Pin type can be customized.

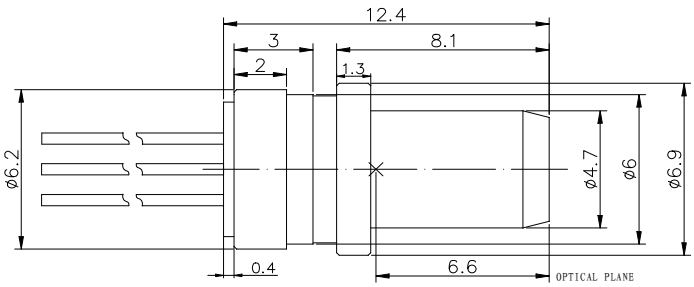
Package dimension *Note3



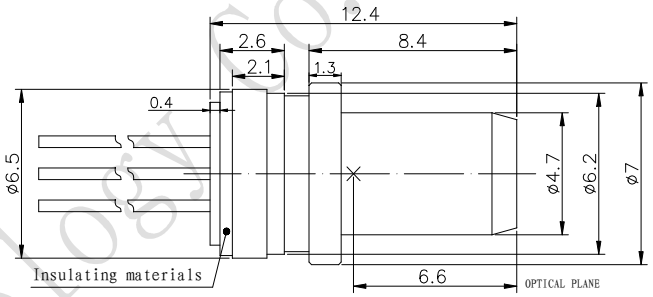
SC-ROSA5



Insulation SC-ROSA5



SC-ROSA6



Insulation SC-ROSA6

*Note3：Insulation is the TO-CAN and the metal pipe insulation.

Nomenclature

S C — R O S A □ □ □ □ □ □ □

A B C D E F G

A	**Split sleeve Type**	5=ROSA5	6=ROSA6	
B	**Insulation**	J= Insulation	BLANK=Non-insulated structure	
C	**Date rate**	3=155Mbps		
D	**Wavelength**	1=1270～1620nm		
E	**Voltage**	0=3.3/5V	3=3.3V	5=5V
F	**Pin Type**	0= pin-A	D= pin-D	
G	**Ferrule sets of type**	BLANK=Without the ceramic sleeve and Without the fiber-stub	B=With a ceramic sleeve	M= with a split sleeve and the MM fiber-stub

Precaution

(1) The modules should be handled in the same manner as ordinary semiconductor devices to prevent the electro-static damages. For safe keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.
(2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.
(3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.

Obtaining Document

You can visit our website:

http://www.eoptolink.com

Or contact Eoptolink Technology Inc., Ltd. listed at the end of the documentation to get the latest documentation.

Revision History

Verision	Initiated	Reviewed	Approved	Release Date
Vb-1	Zore.Zhao	Kelly.Cao		2011-6-21
Vb-2	Jack.jiang	Kelly.Cao Zore.Zhao		2012-1-06

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