

SC-ROSAXX513XXX

622Mbps PIN-TIA Receiver with Receptacle Modules



Features

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

Applications

- ◆ 622Mbps application
- ◆ SDH/SONET application

General

SC-ROSAXX513XXX Series is a 4 pin or 5 pin PIN-TIA with Receptacle operating on 622Mbps. 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-ROSA55130B	NO	3.3	A	Ceramic sleeve
SC-ROSA6J5130W	YES	3.3	A	No ceramic sleeve
SC-ROSA5513DW	NO	3.3	D	No ceramic sleeve
SC-ROSA6J513DB	YES	3.3	D	Ceramic sleeve

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

Absolute maximum ratings

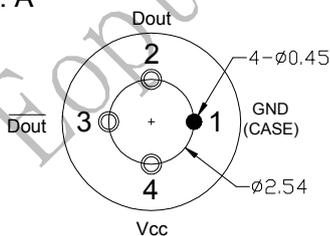
Parameter	Min	Typ.	Max	Unit
Storage Temperature	-40	25	85	°C
Operating Temperature	-40	25	85	°C
TIA Supply Voltage	3.1	3.3	5	V
Operation Relative Humidity	-		85	%
Soldering Temperature / Time	-		260/10	°C/S

Electrical and optical characteristics

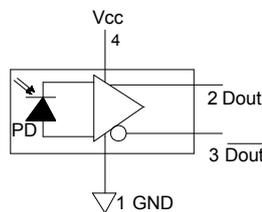
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Wavelength	λ	1270		1620	nm	
Supply Current	I _{cc}		30	40	mA	No Loads
Saturation Power	P _{sat}	-3	0	-	dBm	@ 1310nm
Small-Signal Bandwidth	BW	435			MHz	
Low-Frequency Cut off	LF			5	kHz	
Sensitivity			-32	-30	dBm	1310nm,622Mbps, BER=10 ⁻¹⁰ @ PRBS= 223-1
Single Ended Output Impedance	R		50		Ω	
Rise /FallTime	T			4.5	ns	10~90%

Pin Assignment ^{*Note2}

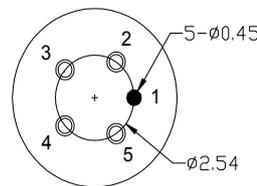
TYPE: A



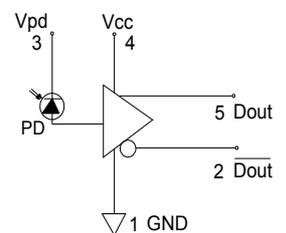
PIN-TIA-pin-A



TYPE: D

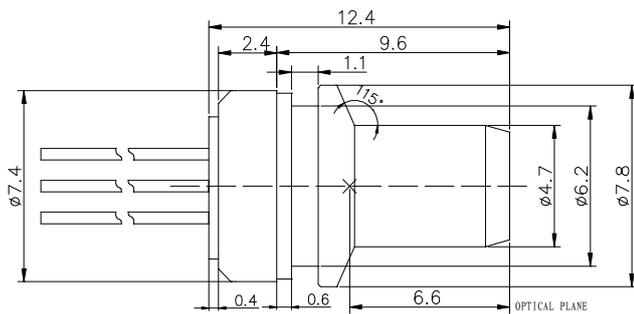


PIN-TIA-pin-D

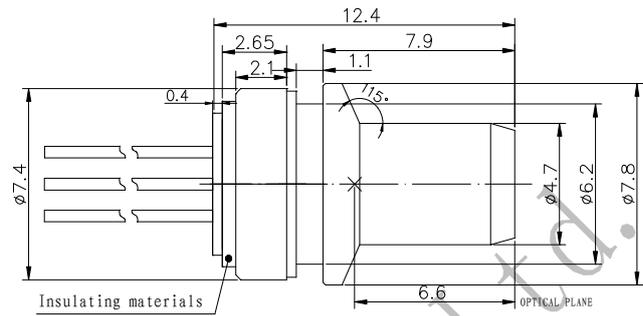


Note2: Other Pin type can be customized.

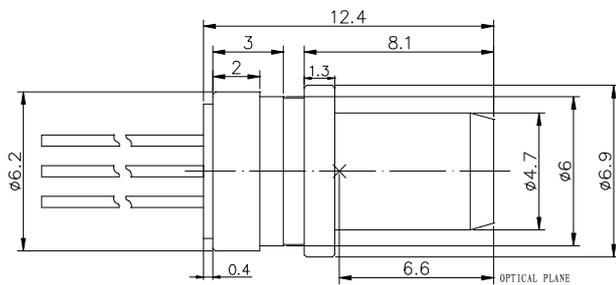
Package dimension ^{*Note3}



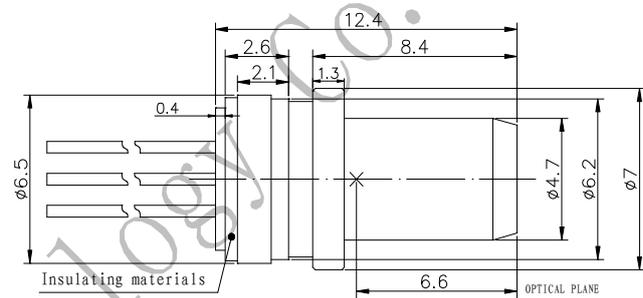
SC-ROSA5



Insulation SC-ROSA5



SC-ROSA6



Insulation SC-ROSA6

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

Nomenclature

SC — ROSA .

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	5=622Mbps	
D	Wavelength	1=1270~1620nm	
E	Voltage	3=3.3V	
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

Version	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

Notice:

Eoptolink reserves the right to make changes or discontinue any product or service identified in this publication, without notice, in order to improve design and/or performance. Applications that are described herein for any of the products are for illustrative purposes only. Eoptolink makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Contact:

Add: Floor 5, Building 2, No. 21 Gaopeng Avenue, High-Tech District, CHENGDU, SICHUAN 610041 P.R.

CHINA

Tel: (+86) 028-85122709 ext 816 & 809

Fax: (+86) 028-85121912

Postal: 610041

E-mail: sales@eoptolink.com

<http://www.eoptolink.com>

Eoptolink Technology Co., Ltd.