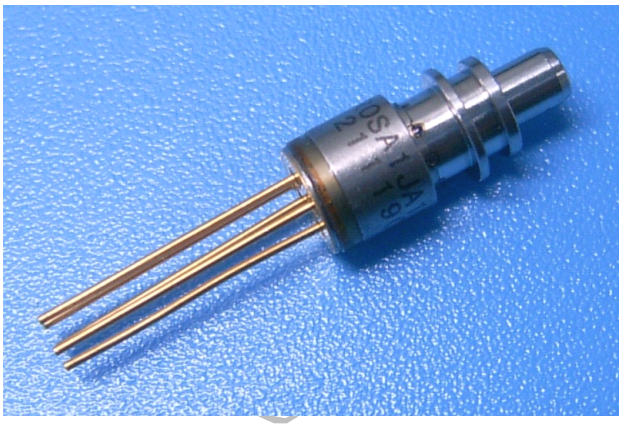
LC-ROSA2JT13EXX

The detector includes a 5 pin PIN-TIA plus AGC Pre-amplifier, supports 10Gbps long distance fiber communication application.



Features

- Differential Output
- Coaxial Package
- Single Power Supply Voltage +3.3V
- Laser Welding, High reliability and Long Operation life
- Wavelength from 1260nm to 1620nm
- Date Rate Up to 10Gbps
- Low Noise
- RoHS Compliant Products Available

Applications

- 10G SONET/SDH System
- 10G Fiber Channel System

General

LC-ROSA2JT13EXX Series is designed for high-speed, high–performance SONET/SDH/Fiber channel applications. This device integrates high-speed 1310nm PIN detector with a 10G trans-impedance amplifier (TIA) and capacitors into a TO-46 header with cap window. LC-ROSA2JT13ELX Series is 5 pin PIN/TIA with Receptacle package to receive light through the PIN detector with high coupling efficiency.

Ordering Information (Standard version *Note1)

Part No.	Wavelength (nm)	Bandwidth (GHz)	TIA supply voltage （V）	Pin Type
LC-ROSA2JT13ELX	1260～1620	10	3.3	E

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

Absolute maximum ratings

Parameter	Symbol	Min	Max	Unit
Operating Temperature	Top	0	85	℃
Storage Temperature	Tstg	-40	85	℃
Lead Solder Temperature	Tlead	—	260	℃
PIN Reverse Voltage	Vpin	—	20	V
Power Supply Voltage	Vp	—	4	V
Optical Power	Pin	—	5	dBm

RECOMMENDED OPERATING CONDITIONS

Test conditions	Symbol	Limits			Unit
		Min.	Typ.	Max.	
TIA supply voltage	Vcc	2.97	3.3	3.63	V
Case temperature	Tc	0		85	℃

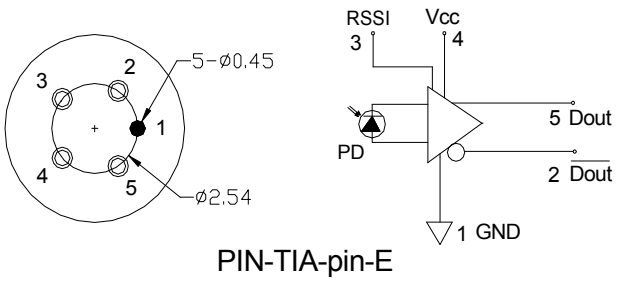
ELECTRICAL / OPTICAL CHARACTERISTICS

(Tc=+25°C, Vcc=3.3V, l=1550nm)

Parameter	Symbol	Test conditions	Min	Typ.	Max	Unit
Supply Voltage	Vcc	—	2.97	3.3	3.63	V
Supply Current	Icc	Vcc=3.3V	34	45	62	mA
Differential Output Voltage	Vout	—	—	250	—	mV
Responsivity	R	λ=1310nm	0.85	—	—	A/W
Wavelength	λ	—	1260	—	1620	nm
RSSI slope	—	—	0.9	1.0	1.1	mA/mA
Optical Return Loss	ORL	dB	-14	—	—	—

Pin Assignment*Note3

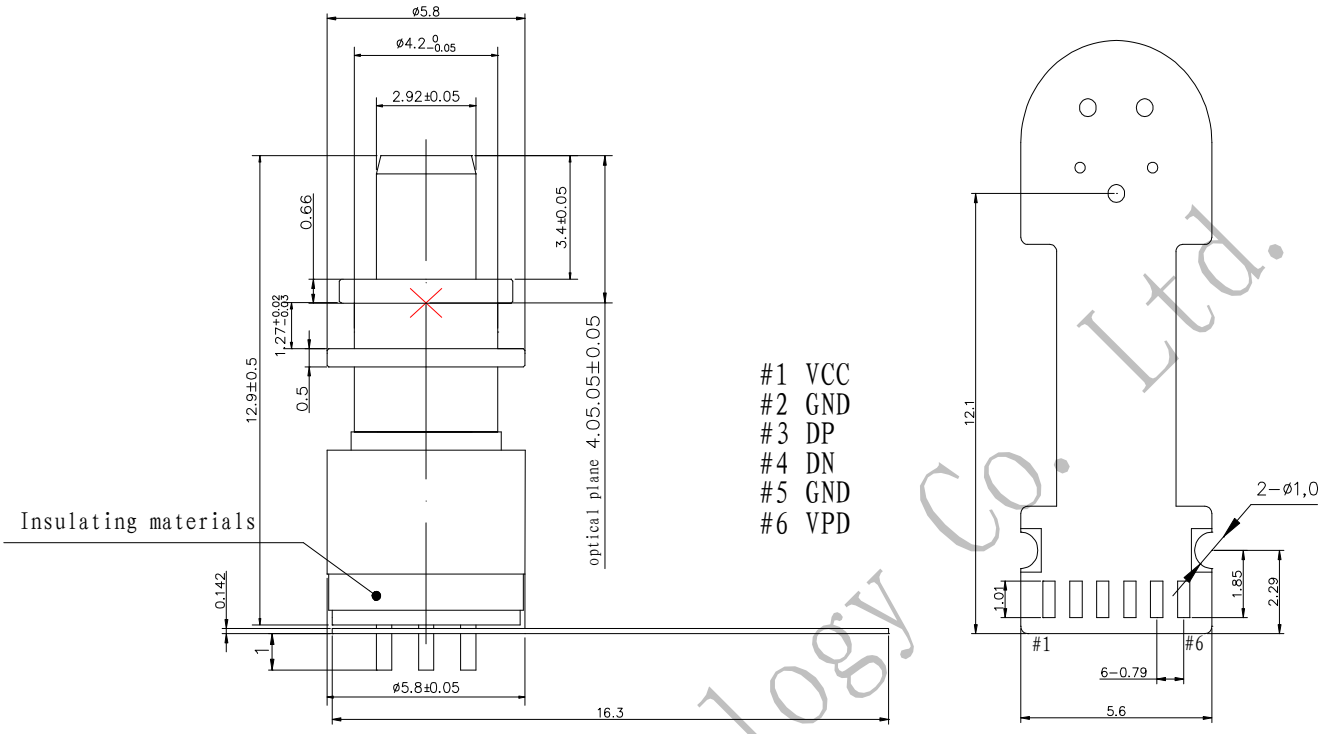
TYPE: E



PIN-TIA-pin-E

Note3: Other Pin type can be customized.

Package dimension *Note4



*Note4：Insulation is the TO-CAN and the metal pipe insulation.

Ordering Information

L C— ROSA2J ☐ ☐ ☐ ☐ ☐ ☐

A B C D E F

A	**Insulation**	J= Insulation	BLANK=Non-insulated structure
B	**Date rate**	T=10Gbps	
C	**Wavelength**	1=1270～1620nm	
D	**Voltage**	3=3.3V	
E	**Pin Type**	E= pin-E	
F	**Chip Type**	LX	

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
Va-1	Zore.Zhao	Kelly.Cao		2011-2-21
VB-1	Zore.Zhao	Kelly.Cao		2011-6-11

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