

1.25G PIN-TIA Receiver with LC Receptacle

Modules

OSML-ROSAX713XX



Features:

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

Applications:

- ◆ 1.25G application
- ◆ SDH/SONET application

General:

OSML-ROSAx713xx Series is a 4 pin or 5 pin PIN-TIA with receptacle operating on 1.25G. It provides high sensitivity with AGC, 100ohm differential outputs and the 4 pin or 5 pin PIN-TIA provides a monitor pin. A split sleeve for the optical connector is jointed with $\phi 1.25\text{mm}$ ferrule.

Ordering Information: (Standard version ^{*Note1})

Part No.	Insulation	Wavelength (nm)	Voltage (V)	Pin Type
OSML-ROSA7130B	NO	1270~1620	3.3	A
OSML-ROSAJ713EB	YES	1270~1620	3.3	E
OSML-ROSA713DB	NO	1270~1620	3.3	D
OSML-ROSAJ713DB	YES	1270~1620	3.3	D

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

Absolute Maximum Ratings:

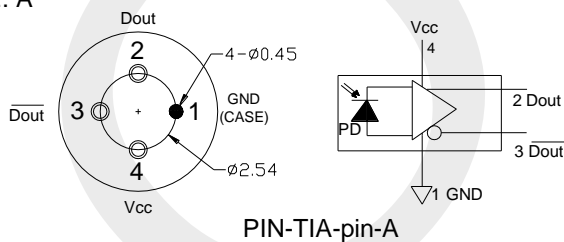
Parameter	Min.	Typ.	Max.	Unit
Storage Temperature	-40	25	85	°C
Operating Temperature	-40	25	85	°C
TIA Supply Voltage	3.1	3.3	3.5	V
Operation Relative Humidity	-		85	%
Soldering Temperature / Time	-		260/10	°C/S

Electrical and Optical Characteristics:

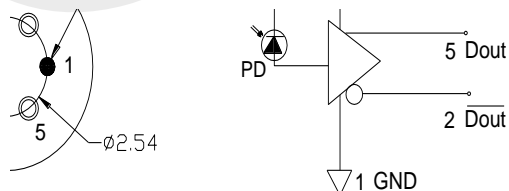
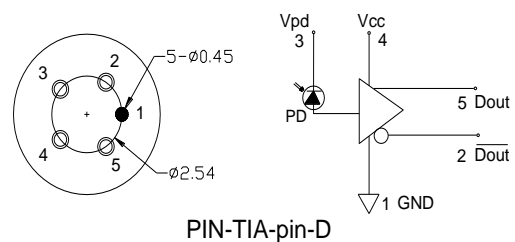
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Wavelength	λ	1270		1620	nm	
Supply Current	I _{cc}		30	40	mA	No Loads
Saturation Power	P _{sat}	0	0	-	dBm	@ 1310nm
Small-Signal Bandwidth	BW	700			MHz	
Low-Frequency Cut off	LF			5	kHz	
Sensitivity			-28	-25	dBm	$\lambda=1310$ nm, @1.25G,PRBS7, ER=10dB, BER=1E-10
Single Ended Output Impedance	R	35	50	60	Ω	
Rise /Fall Time	T		300	400	ps	20~80%

Pin Assignment: *Note2

TYPE: A

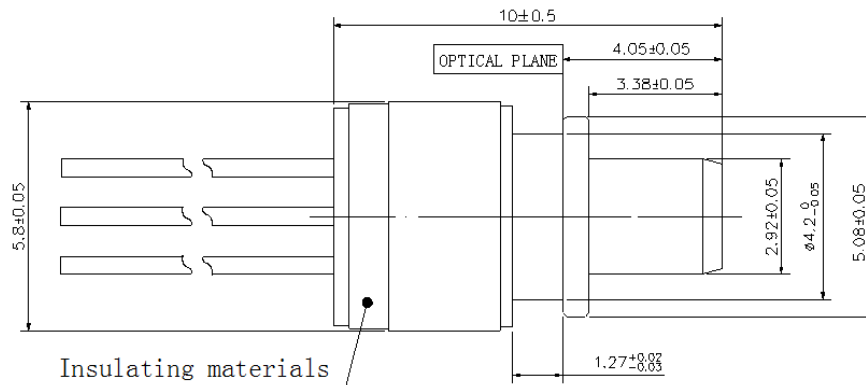


TYPE: D

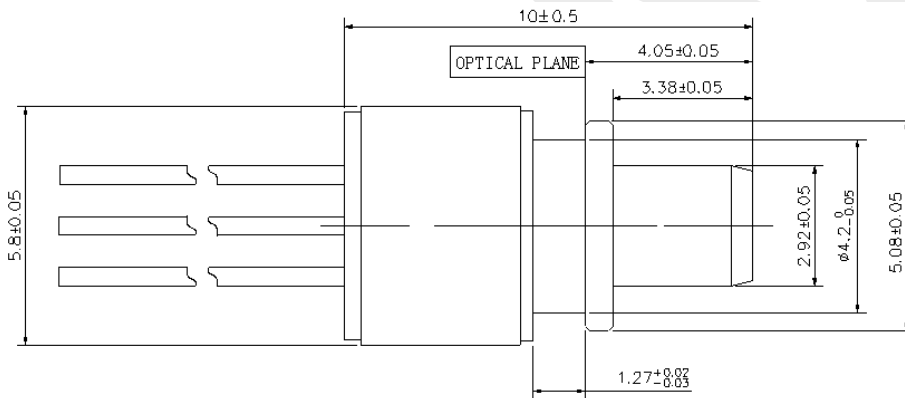


Note2: Other Pin type can be customized.

Package Dimension: *Note3



Insulation



Not insulated

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

Nomenclature:

OSML- ROSA

A B C D E F

A	Insulation	J= Insulation		BLANK=Non-insulated structure	
B	Data Rate	7=1.25G			
C	Wavelength	1=1270~1620nm			
D	Voltage	3=3.3V			
E	Pin Type	0= pin-A	D= pin-D	E= pin-E	
F	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.

Notice:

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