

2.5 Gbps 1310 nm LC-ROSA (Preliminary)

Product Description:

The LuxNet DI2A-9060 LC-ROSA (Receiver Optical Sub-Assembly) is designed for a high-speed, high-performance data communications and telecommunications applications. This device integrates our high-speed 1310 nm PIN detector with an STM16/OC48 transimpedance amplifier (TIA) and capacitors in a TO-46 header with a flat window cap and plastic lensed optical-port. The product is designed for OC48 long distance optical communication system. The LC type of plastic port is engaged with a fiber connector to transmit the light from fiber through an LC receptacle into the PIN detector with high coupling efficiency.

Product Specifications:

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	0	90	
Storage Temperature	T _{stg}	°C	-40	100	
Solder Reflow Temperature	T _{stg}	°C		260	10 seconds max.
Power Supply Voltage	V _P	V		3.8	
Forward Current	I _f	mA		10	
Reverse Voltage	V _r	V		20	
Reverse Current	I _r	mA		1	

Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

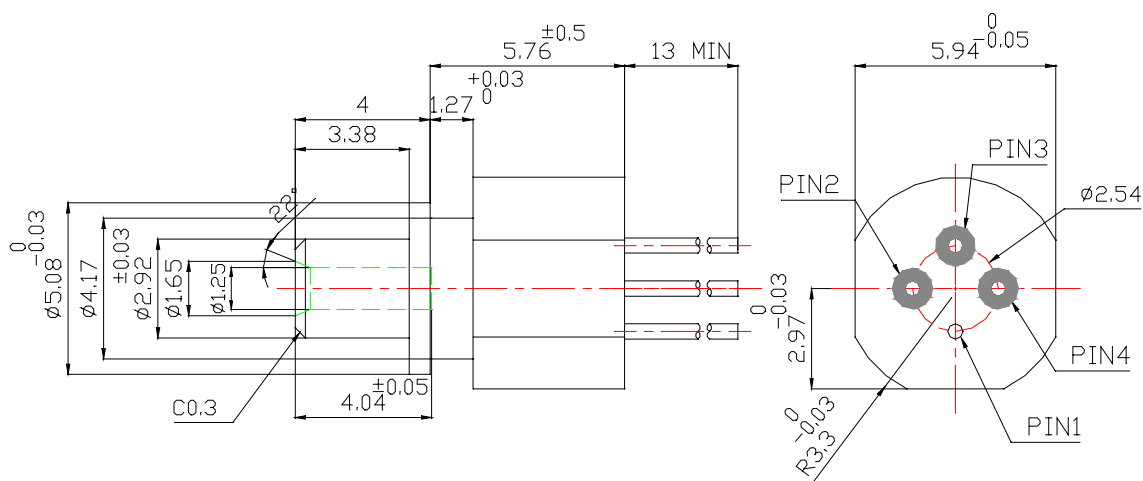
Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V _{cc}	Volts	3	3.3		P=0 μW, Rload=50 Ohm
Supply Current	I _{cc}	mA		35		P=0 μW, Rload=50 Ohm
Output Voltage	V _{out}	mV		160		P=100 μW, Rload=50 Ohm
Responsivity	R	V/W	1400			P=20 μW, Rload=50 Ohm
Upper 3 dB Bandwidth	BW _{upper}	GHz	2.0			
Sensitivity	S	dBm	-20			2 ⁷ -1 PRBS, BER=10 ⁻¹²
Pulse Width Distortion	PWD	ps			40	Pin = -17dBm
Peak Wavelength	λ	nm	1300	1310	1320	
Rise/Fall Time	τ _r /τ _f	ps		100		V _R = 2 V; 20-80%

* Specifications are subject to change without notice.
 * Screening per customer-specified reject limits is available.

DI2A-9060

Dimensions: (mm)

All dimensions are nominal



PINOUT

DI2A-9060	
Pin Number	Function
1	Gnd
2	Non-Inverted Output
3	Vcc
4	Inverted Output