

1310 nm 2.5 Gbps 5-Pin LC-ROSA

DI2S-9060-x 5-Pin series

TYPE NAME: DI2S-9060-3C

Product Description:

The LuxNet DI2S-9060-x 5-pin LC-ROSA (Receiver Optical Sub-Assembly) is designed for high-speed, high-performance data communication and telecommunication applications. This ROSA provides special digital diagnostic capability for transceivers with a wide dynamic range of input optical power. This device integrates our high-speed 1310 nm PIN detector with an STM16/OC48 trans-impedance amplifier (TIA) and capacitors into a TO-46 5-pin header with cap window and LC port. The product is designed for OC-48 long distance optical communication systems. The LC-type optical port has a fiber connector that transmits light 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	-40	85	
Storage Temperature	T _{stg}	°C	-40	100	
Solder Reflow Temperature	T _{slr}	°C		260	10 seconds max.
Power Supply Voltage	V _p	V	-0.5	6	
Optical Power	P _{in}	dBm		5	

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

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V	V	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	25	32	40	P _m = 0 μW, R _L = 50Ω
Output Voltage (differential)	V _{op}	mV		250	400	P _m = 100 μW, R _L = 50Ω
Responsivity	R	KV/W		17		λ = 1310nm P _m = 1.5 μW, AC Coupled to R _L = 50Ω
Upper -3dB Bandwidth	BW	GHz		2.0		R _L = 50Ω
Sensitivity	S	dBm		-24	-22	λ = 1310nm 2 ²³ - 1 PRBS, BER = 10 ⁻¹⁰
Peak Wavelength	λ _p	nm	1100	1310	1650	
Rise/Fall Time	τ _r /τ _f	ps		150/150		V _{cc} = 3.3V (20%-80%)
Dark Current	I _d	nA			20	V _r = 3.3V
Saturation Power	P _{sat}	dBm			-1	
Optical Return Loss	ORL	dB			-14	

* Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

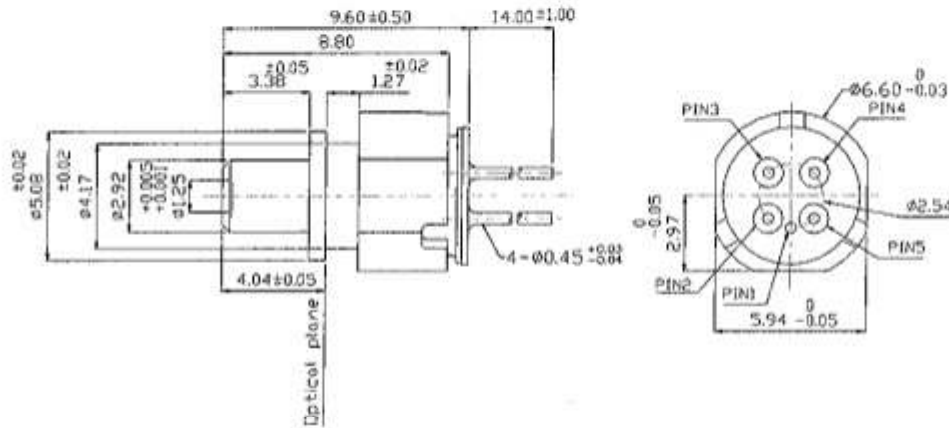
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Dimensions: (mm)
All dimensions are nominal

DI2S-9060-3X (LC-ROSA)



PINOUT

DI2S-9060-3C	
Pin Number	Function
1	Gnd
2	Non-Inverted Output(D)
3	Vcc
4	PD Monitor(Vpd)
5	Inverted Output(D*)

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* Screening per customer-specified reject limits is available.