

1310nm 155Mbps ROSA (3.3V) for LED light source

DI6S-908x-1 Series (3.3V)

TYPE NAME: DI6S-9080-1,

Product Description:

The LuxNet DI6S-908x-1 (3.3V) ROSA (Receiver Optical Sub-Assembly) is designed for a high-speed, high-performance data communication and telecommunication applications. This device integrates our high-speed 1310 nm PIN detector with a STM1/OC3 trans-impedance amplifier (TIA) and capacitors with a TO-46 header with cap window and optical port. The product is designed for OC-3 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):

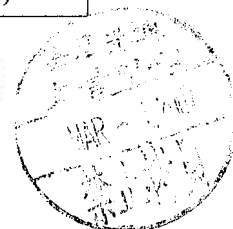
Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	-40	85	
Storage Temperature	T _{stg}	°C	-40	100	
Solder Reflow Temperature	T _{stg}	°C		260	10 seconds max.
Power Supply Voltage	V _p	V		4.5	
Optical Power	P _{in}	dBm		5	

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

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V _{cc}	Volts	3.0	3.3	3.5	
Supply Current	I _{cc}	mA		22	32	P _m = 0 μW, R _L = 50Ω
Output Voltage (differential)	V _{out}	mV		200		P _m = 10 μW, R _L = 50Ω
Responsivity	R	KV/W		45.5		λ = 1310nm P _m = 1.5 μW, AC Coupled to R _L = 50Ω Φ62.5um fiber
Upper -3dB Bandwidth	BW	MHz	110	140		R _L = 50Ω
Sensitivity	S	dBm		-37	-35.5	λ = 1310nm (LED light source) 2 ²³ - 1 PRBS, BER = 10 ⁻¹⁰ Φ62.5um fiber
Peak Wavelength	λ _p	nm	1100	1310	1650	
Rise/Fall Time	τ _r /τ _f	ns		1.6/1.6	2.0/2.0	V _{cc} = 3.3V; (20%-80%)

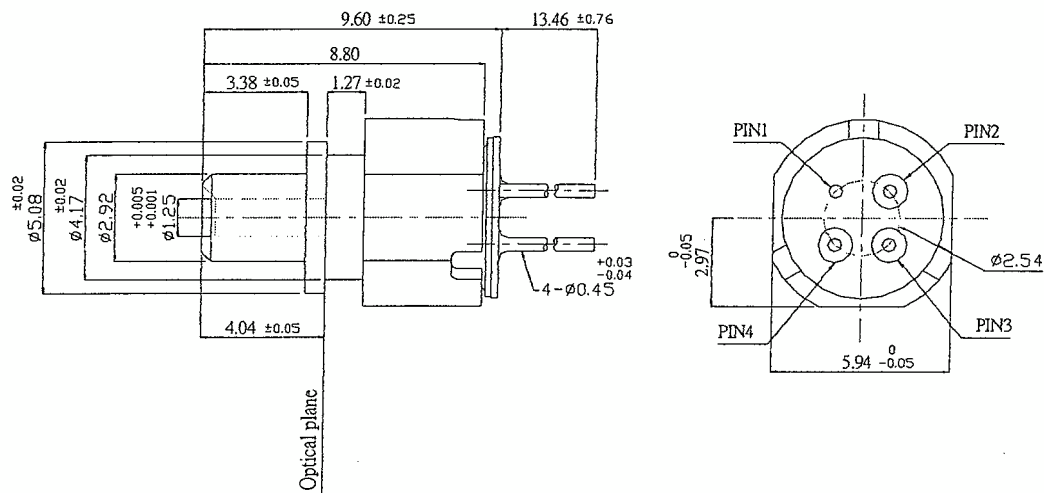
- * Specifications are subject to change without notice.
- * Screening per customer-specified reject limits is available.

Version 1.1



DI6S-9080-1 (LC-ROSA)

Dimensions: (mm) *All dimensions are nominal*



PINOUT

DI6S-9080-1	
Number	Function
1	Gnd
2	Inverted Output (D*)
3	Vcc
4	Non-Inverted Output (D)



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