

1310nm 155Mbps 5Pin Low Optical Return Loss LC-ROSA

DI6S-9060-4

TYPE NAME: DI6S-9060-4

Product Description:

The LuxNet DI6S-9060-4 5pin low optical return loss 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 STM1/OC3 transimpedance amplifier (TIA) and capacitors into a TO-46 5-pin header with cap window and LC port. The product is designed for OC-3/STM-1 long-haul inter-office optical communication systems, where low optical return loss is required. The LC-type optical port with fiber stub transmits light into the PIN detector with high coupling efficiency and low return loss.

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	

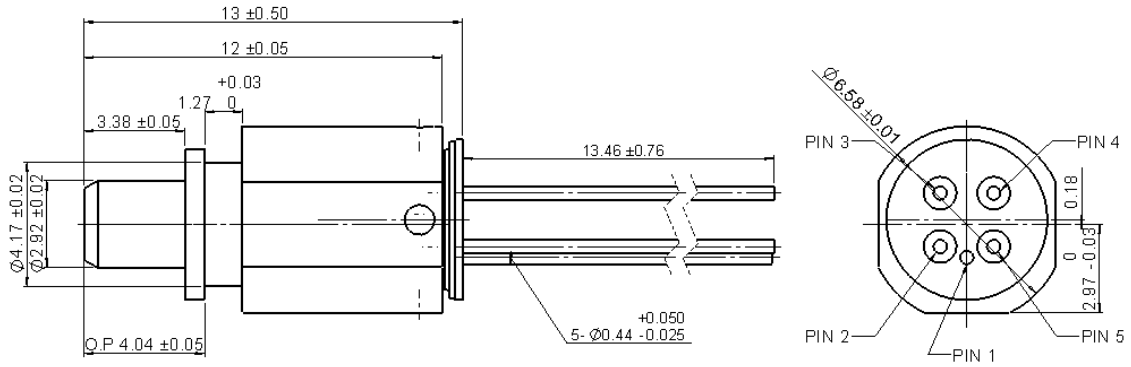
Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V	V	2.97	3.3	3.63	
Supply Current	I _{cc}	mA	12	22	32	V _{cc} =3.3V
Output Voltage (differential)	V _{op}	mV			800	R _L = 100Ω
Upper -3dB Bandwidth	BW	MHz		140		R _L = 50Ω
Sensitivity	S	dBm			-37	λ=1310nm 2 ²³ - 1 PRBS, BER= 10 ⁻¹⁰
Wavelength	λ	nm	1100	1310	1650	
Rise/Fall Time	τ _r /τ _f	ps			2.6/2.6	(20%-80%)
Dark Current	I _d	nA			10	V _i =-3.3V
Optical Return Loss	ORL	dB	-27			

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

DI6S-9060-4(LC-ROSA)

Dimensions: (mm)
All dimensions are nominal



PINOUT

DI6S-9060-4	
Pin Number	Function
1	Gnd
2	Non-Inverted Output(D+)
3	Vcc
4	Power Monitor(Vpd)
5	Inverted Output(D*)

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



No. 6, Hejiang Road, Zhongli City,
Taoyuan County, TAIWAN
Tel: +886-3-452-5188
Fax: +886-3-462-9588
www.luxnetcorp.com.tw

1310nm 155Mbps 5Pin Low Optical Return Loss LC-ROSA

Notice

Version	Date	Status	Description	Signature
1.0	2014/5/26	Initial	DI6S-9060-4 Spec.	Cherry

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

Version 1.0