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850 nm 1.0625/1.25Gbps ROSA

MG1F-901x-x Series

TYPE NAME: MG1F-9010-1N, MG1F-9010-6N, MG1F-9011-1N

Product Description:

The LuxNet MG1F-901x-x ROSA (Receiver Optical Sub-Assembly) is designed for high-speed, high-performance data communication applications. This device is integrated with an 850nm PIN, TO-46 header, and plastic port. The product is designed for 1.25Gbps Fiber Channel, Gigabit Ethernet, and ATM/SONET transceiver modules and systems. The plastic port is engaged with a fiber connector to align light and to provide good coupling efficiency as light generated by the VCSEL is transmitted through multimode fiber into detector.

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	85	
Solder Reflow Temperature	T _s	°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):

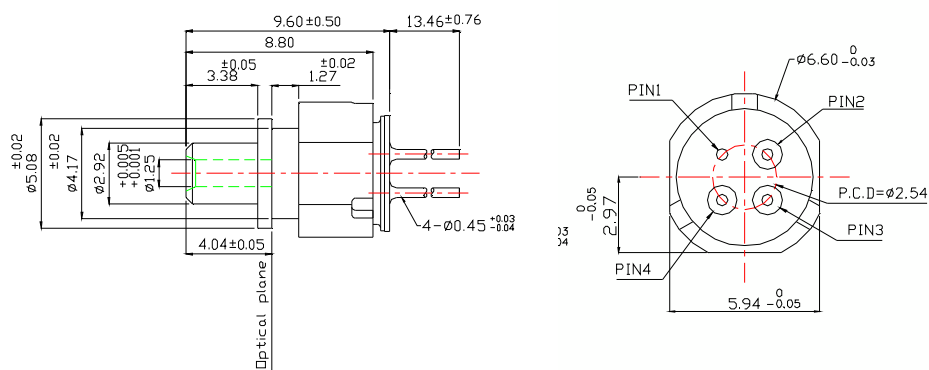
Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V _{cc}	Volts	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	23	28	35	P=0 μW, R _L = 50Ω
Output Voltage (Differential)	V _{out}	mV		275	500	R _L = 50Ω
Responsivity	R	KV/W		33.7		P=7.5 μW, R _L = 50Ω
Upper 3 dB Bandwidth	BW _{upper}	MHz	730	812	893	R _L = 50Ω
Sensitivity	S	dBm		-26	-24	2 ⁷ -1 PRBS, BER=10 ⁻¹⁰
Wavelength	λ	nm	760	850	860	
Rise/Fall Time	τ _r /τ _f	ps	200	300	400	20-80%

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

Version 1.5

MG1F-9010-x (LC-ROSA)

Dimensions: (mm)
All dimensions are nominal



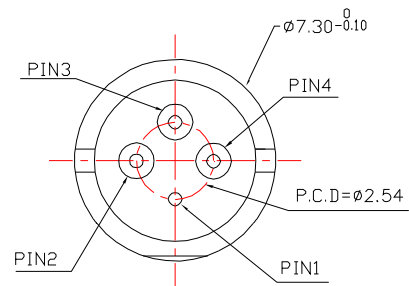
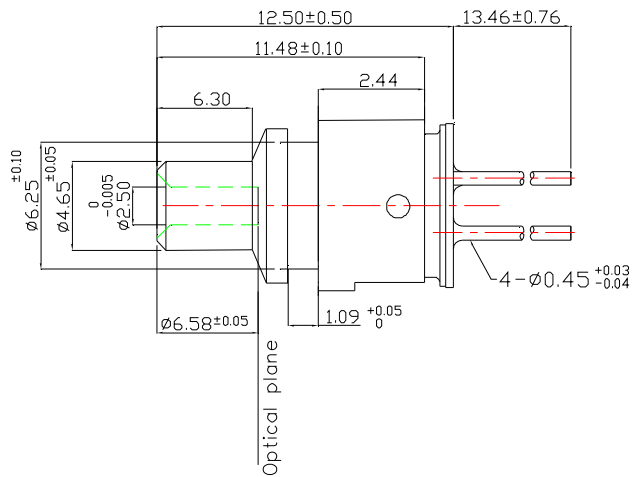
PINOUT

Number	MG1F-9010-1N	MG1F-9010-6N
	Function	Function
1	Gnd	Gnd
2	Non-Inverted output(D+)	Vcc
3	Vcc	Inverted output(D*)
4	Inverted output (D*)	Non-Inverted output(D+)

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

MG1F-9011-1N (SC-ROSA)

Dimensions: (mm)
All dimensions are nominal



PINOUT

MG1F-9011-1N	
Number	Function
1	Gnd
2	Non-Inverted output(D+)
3	Vcc
4	Inverted output (D*)

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