

## 850nm 8.5/10Gbps LC-ROSA

### MG5G-907x-Kx Series

**TYPE NAME: MG5G-907J-K10**

#### Product Description:

The LuxNet 850nm 8.5/10G LC-ROSA (Receiver Optical Sub-Assembly) is designed for 8G/10Gbps data communication performance requirements through multi mode optical fiber. This device integrates with a 8.5/10G high speed GaAs PIN chip and a trans-impedance amplifier (TIA) into a TO-46 cap, 5-pin header and LC plastic receptacle. A flex provides interconnects from header leads to transceiver PCB with controlled impedance. This product is designed for the applications include 8G Fiber channel, 10G Ethernet.

#### Product Specifications:

##### Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T <sub>op</sub>	°C	-40	85	
Storage Temperature	T <sub>stg</sub>	°C	-40	85	
Solder Reflow Temperature	T <sub>s</sub>	°C		260	10 seconds max.
Power Supply Voltage	V <sub>p</sub>	V	-0.5	5	
Optical Power	P <sub>o</sub>	dBm		5	

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

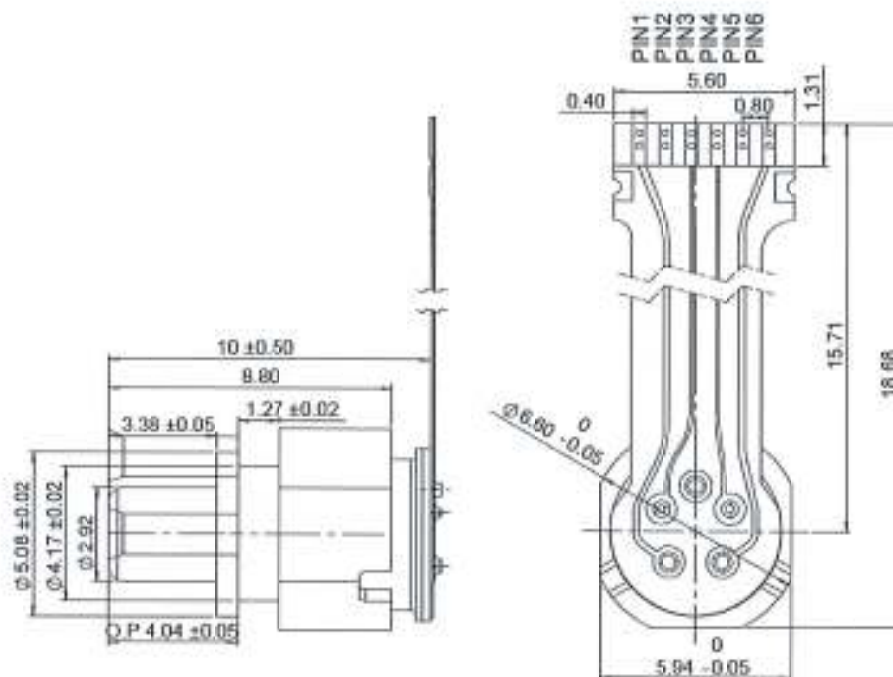
Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V	V	2.97	3.3	3.63	
Supply Current	I <sub>cc</sub>	mA		27	34	V <sub>cc</sub> =3.3V
Responsivity	R	A/W	0.45	0.50		λ=850nm
Sensitivity	S	dBm			-13	λ=850nm@10.3125G PRBS=2 <sup>31</sup> -1, BER=10 <sup>-12</sup> , ER=4.5~5.0dB Fiber@62.5mm
Wavelength	λ	nm	840	850	860	
Rise/Fall Time	T <sub>R</sub> /T <sub>F</sub>	ps		40	50	V <sub>cc</sub> =3.3V (20%-80%)
RSSI Accuracy		%	-10	-	+10	
RSSI offset		nA	0	40	100	
RSSI Linearity limit		mA			1.6	

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

## MG5G-907J-KI0 (LC-ROSA)

**Dimensions: (mm)**

*All dimensions are nominal*



Flex board PINOUT(Bottom View)

MG5G-907J-KI0	
Number	Function
1	RSSI(Current Source)
2	GND
3	Inverted output(D*)
4	Non-Inverted output(D+)
5	GND
6	VCC

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### Notice

Version	Date	Status	Description	Signature
1.0	2012/10/08	Initial	MG5G-907J-K10 Specification	Sammi
1.1	2013/06/07	Modify	Modify Responsivity Test Condition From $\lambda=1310\text{nm}$ to $\lambda=850\text{nm}$ Modify Address	Maggie

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Version 1.1