

10G 1310/1550nm PIN-TIA LC ROSA

L-AR-EM99-xx Series

TYPE NAME: L-AR-EM99-02

Product Description:

The LuxNet 1310nm 10G LC-ROSA (Receiver Optical Sub-Assembly) is designed for 10Gbps data communication performance requirements through single mode optical fiber. This device integrates with 10G high speed InGaAs PIN chip and trans-impedance amplifier (TIA) into a TO-46 cap, 5-pin header and LC plastic port. A flex provides interconnects from header leads to transceiver PCB with controlled impedance. This product is designed for the application of 10G SONET/SDH.

Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	-40	+85	
Storage Temperature	T _{stg}	°C	-40	+85	
Solder Reflow Temperature(10sec)	--	°C	-	260	
Power supply Voltage	V _p	V	0.5	4.5	

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

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Supply Voltage	V _{cc}	V	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	20	30	38	V _{cc} =3.3V
Sensitivity	S	dBm	-	-	-14.5	λ=1310nm, Data Rate=10.3125Gbps PRBS=2 ³¹ -1, BER=10 ⁻¹² , ER=4.5dB
Responsivity	R	A/W	0.83	-	-	λ=1310nm,
Low Frequency Cut Off	LFC	KHz	25	30	45	
Peak Wavelength	λ _p	nm	1260	1310	1620	
Rise / Fall Time	Tr/Tf	ps	-	40	50	20% to 80%
Overload Power	P _{load}	dBm	0.5	-	-	λ=1310nm, Data Rate=10.3125Gbps PRBS=2 ³¹ -1, BER=10 ⁻¹² , ER=4.5dB
RSSI slope		%	-10	-	+10	

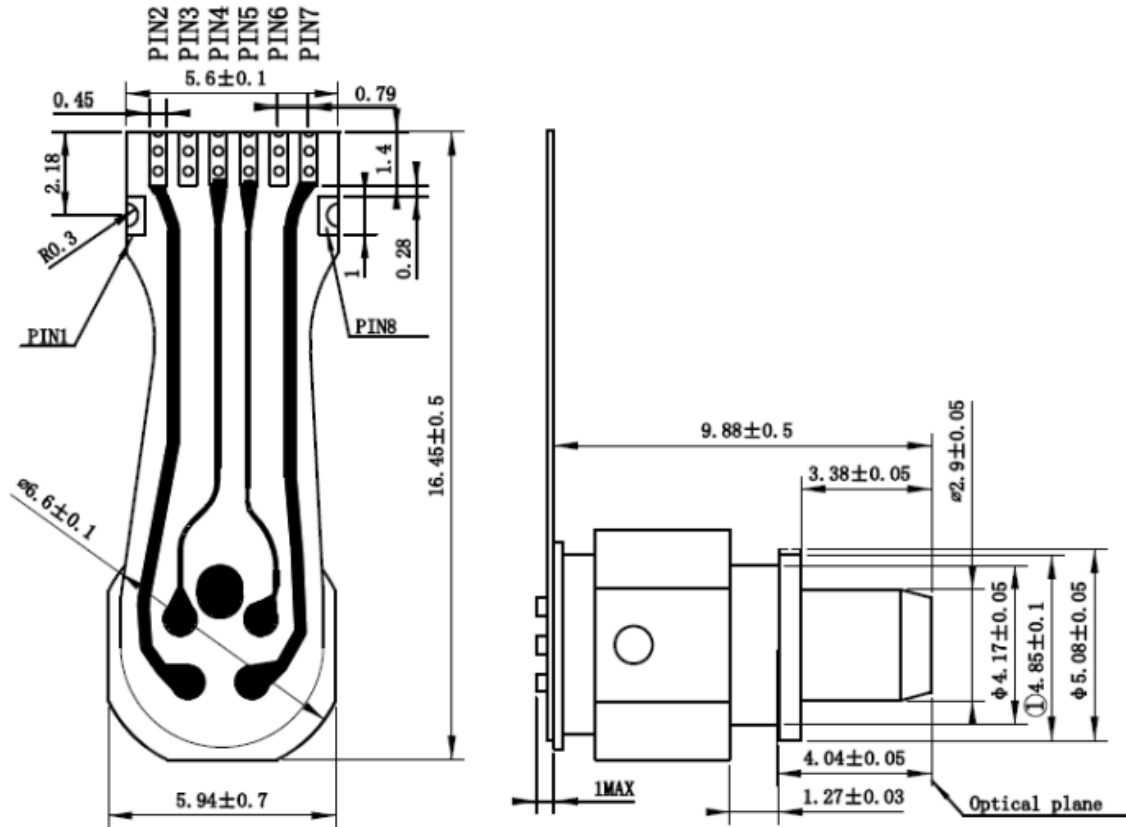
* Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

Version 1.4

L-AR-EM99-02 (LC-ROSA)

Dimensions: (mm)



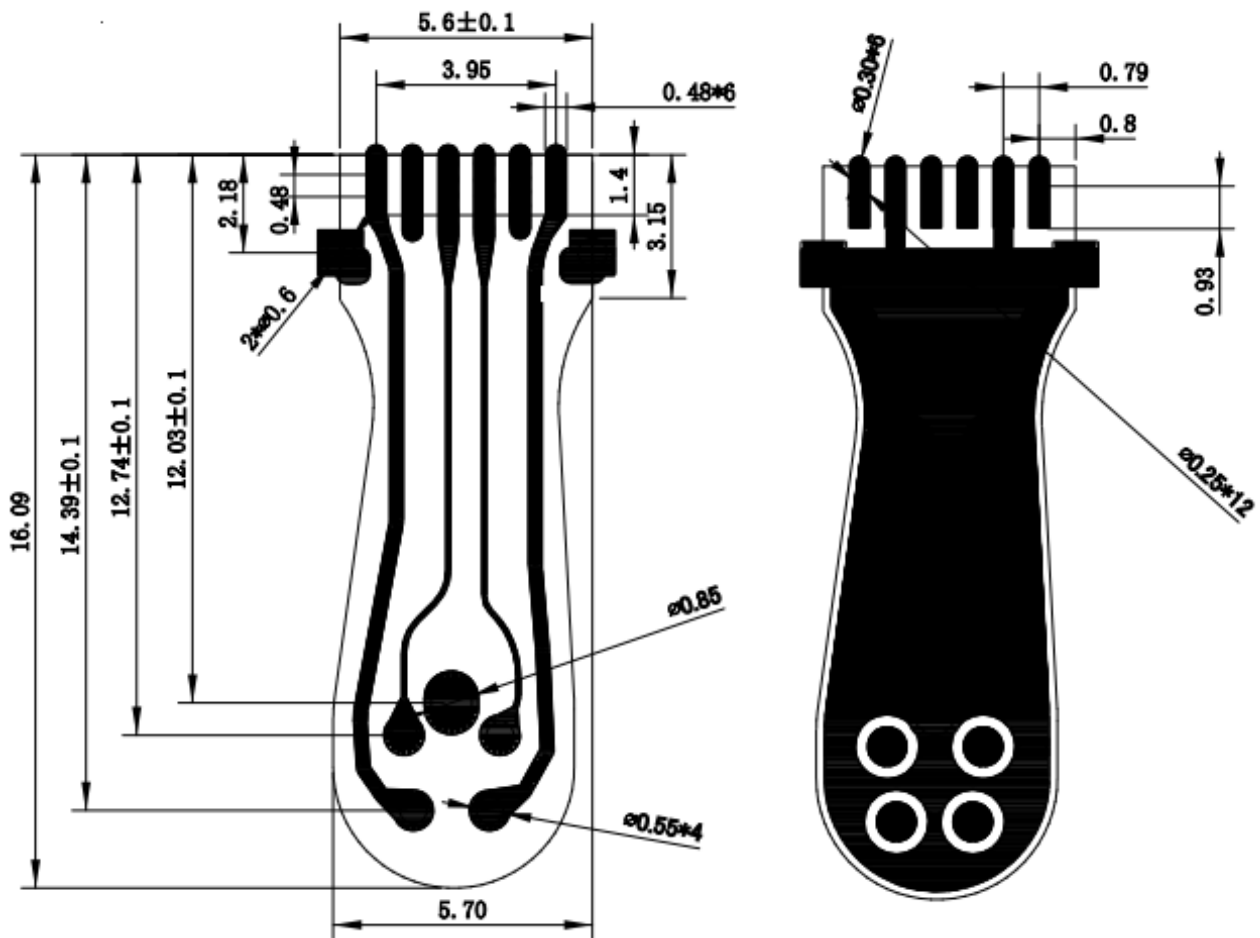
PIN definition

PN	Function
PIN1	GND
PIN2	Isource
PIN3	GND
PIN4	Dout-
PIN5	Dout+
PIN6	GND
PIN7	VCC
PIN8	GND

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FPC Drawing



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