

1310/1550nm 10Gbps Low Optical Return Loss LC-ROSA

MI5E-903G-Kx Series

TYPE NAME: MI5E-903G-KS3

Product Description:

The LuxNet 1310/1550nm 10G 5pin low optical return loss 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 receptacle with fiber stub. A flex provides interconnects from header leads to transceiver PCB with controlled impedance. This product is designed for the application of 10G SONET/SDH. 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:

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	5	
Optical Power	P _{in}	dBm		5	

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

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition/Remark
Supply Voltage	V _{cc}	Volts	2.97	3.3	3.63	
Supply Current	I _{cc}	mA	34	45	62	V _{cc} =3.3V
Sensitivity	S	dBm			-16.5	λ=1310nm, Speed=10.3125Gbps, PRBS=2 ³¹ -1, BER=10 ⁻¹² , ER=5.0dB
Wavelength	λ	nm	1260	1310	1620	
Rise/Fall Time	T _R /T _F	ps			60	(20%-80%), Speed=10.7Gbps
Overload Power	P _{load}	dBm	0.5			λ=1310nm, PRBS=2 ³¹ -1, BER=10 ⁻¹²
Optical Return Loss	ORL	dB			-27	λ=1310&1550nm
RSSI slope		mA/mA	0.9	1.0	1.1	λ=1310nm
RSSI Linearity limit		mA			1.6	Current Source Output
3dB bandwidth		GHz	6.0			Temperature:-40~90°C, Voltage:2.97,3.30,3.63

* Specifications are subject to change without notice.

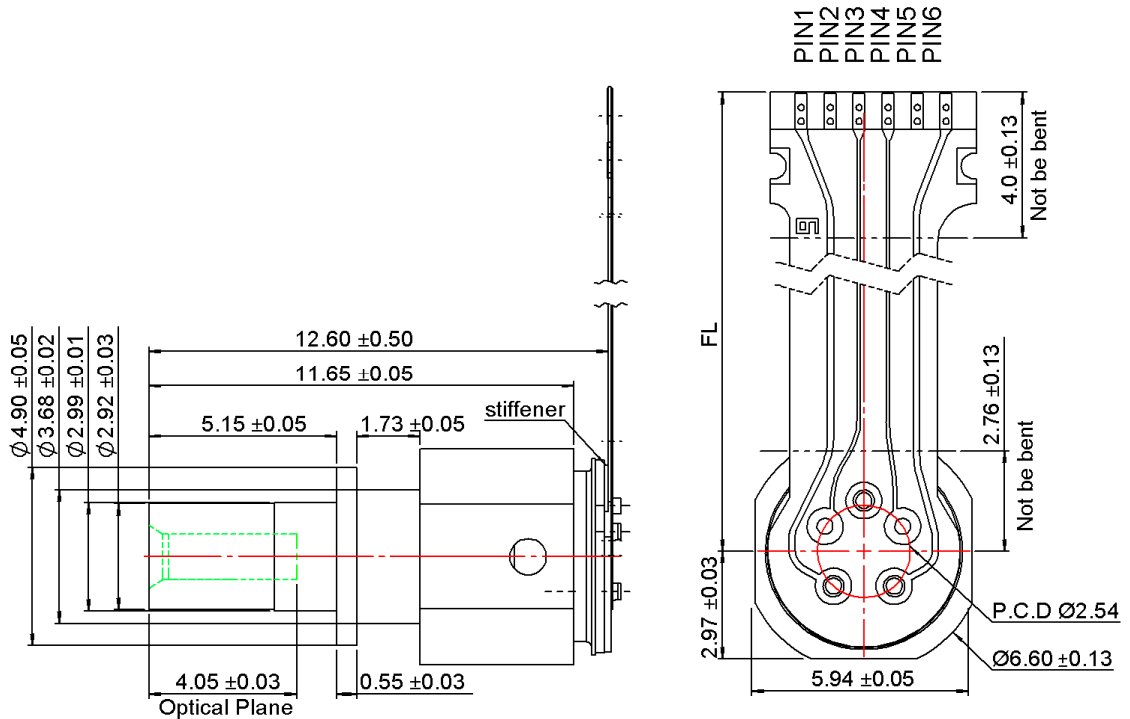
* Screening per customer-specified reject limits is available.

Version 1.1

MI5E-903G-KS3 (LC-ROSA)

Dimensions: (mm)

All dimensions are nominal



Flex board PINOUT (Bottom View)

MI5E-903G-KS3 (FL:15.7mm)	
Number	Function
1	RSSI (Current Source Output)
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	2012/10/11	Initial	MI5E-903G-KS3 Spec.	Maggie

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Version 1.1