



Features:

- 5 pin LC ROSA
- TO-46 package
- Data rates from 155Mbps to 3.125 Gbps
- 9/125 μm singlemode fiber pigtail assembly
- Configurable fiber assembly length



COTSWORKS 3.125G LX ROSA is ideal for high speed fiber optic communications



Commercial Aerospace



Military Aerospace



Military Tactical



Industrial Oil & Gas



Military Sensing



Undersea Networking

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Storage Temperature	T _{sto}	-40	95	°C	
Case Operating Temperature	T _{op}	-40	85	°C	
Lead Solder Temperature	T _{solder}		260	°C	(1)
ESD Exposure (Human Body Model)	V _{ESD}		225	V	(2)

Notes

- 1) Hand solder for 10 seconds
- 2) Proper ESD conditions should be employed while attaching to host board.

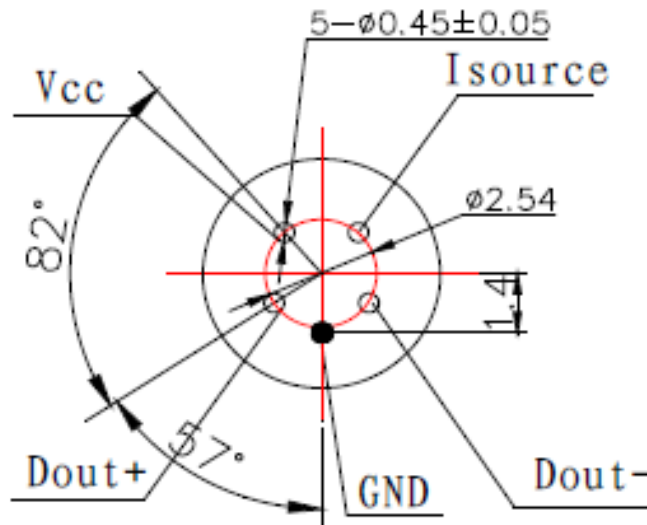


Opto-Electric Specifications

Parameters	Test Condition	Symbol	Min.	Typ.	Max.	Units	Notes
Data Rate		DR	0.15		3.125	Gbps	
Supply Voltage		V _{CC}	2.97	3.30	3.63	V	
Supply Current	No Loads	I _{CC}		24	30	mA	(1)
Input Optical Wavelength		λ _P	1260		1620	nm	
Maximum Average Input Power before Overload		P _{MAX}	0			dBm	
Sensitivity	DR=155 Mbps DR=1.25 Gbps DR=3.125Gbps	S			-30 -23 -21	dBm	1310nm
Rise/Fall Time	P _{R,OMA} = -12dBm, (20%–80%)	T _R /T _F			120	ps	(2)(3)

Notes:

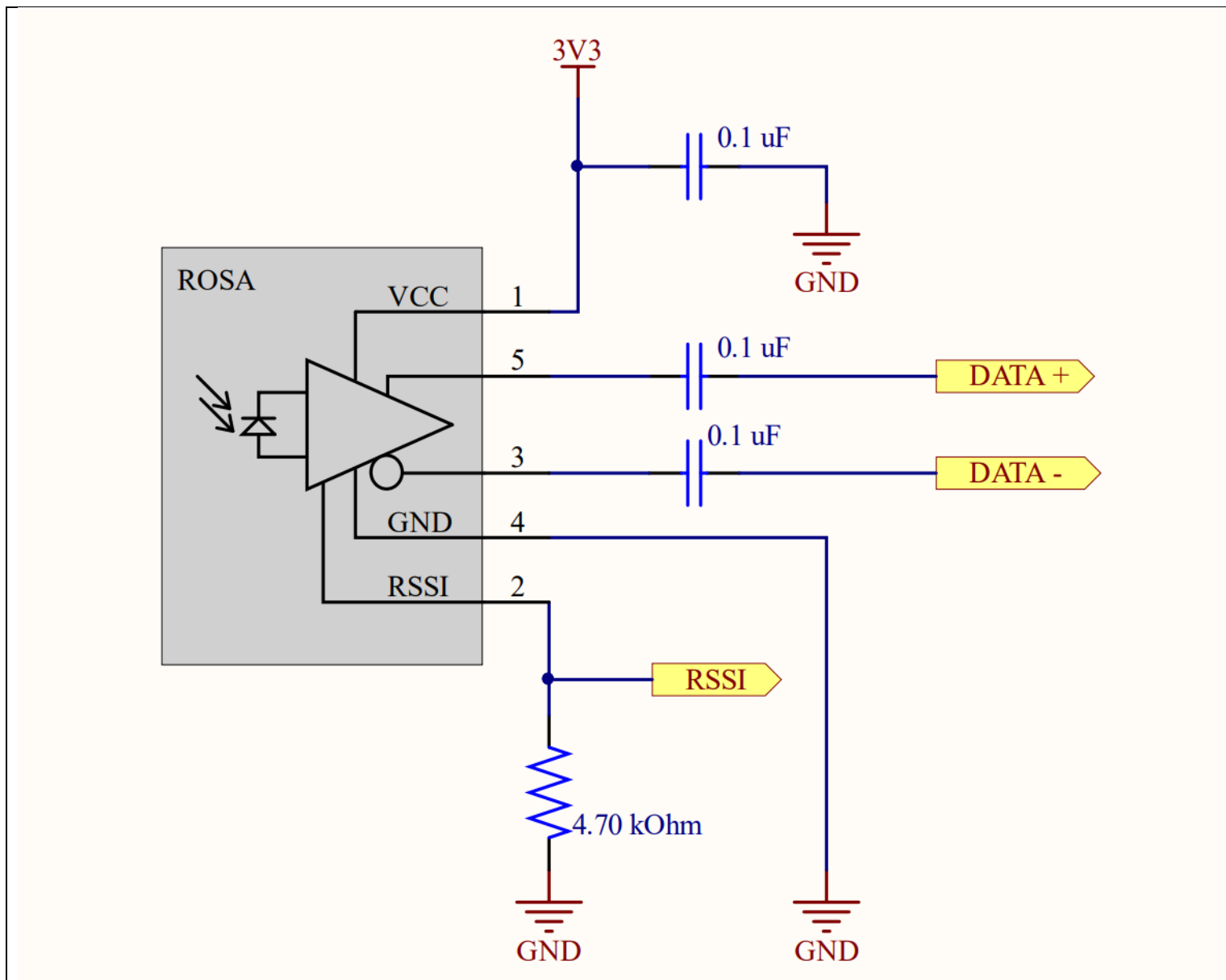
1. PR is the average optical power at the fiber face.
2. P_{R,OMA} is the peak-to-peak optical power at the fiber face (optical Module Amplitude) $P_{R,OMA} \equiv \frac{2P_R(ER-1)}{ER+1}$ where ER is the extinction ratio
3. Rise/Fall times are corrected for optical source Rise/Fall times. $T^2_{TIA} = T^2_{MEASURED} - T^2_{OPTICAL}$

Electrical Pinout

BOTTOM VIEW

Dimensions in [mm]

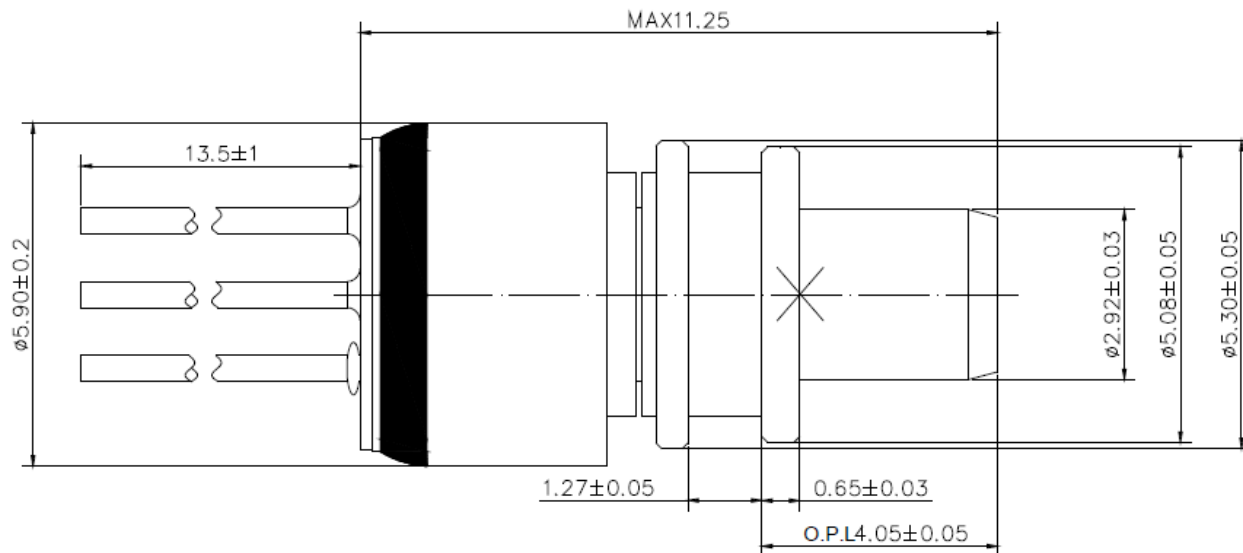


Application Schematic





Mechanical Dimensions



Dimensions in [mm]

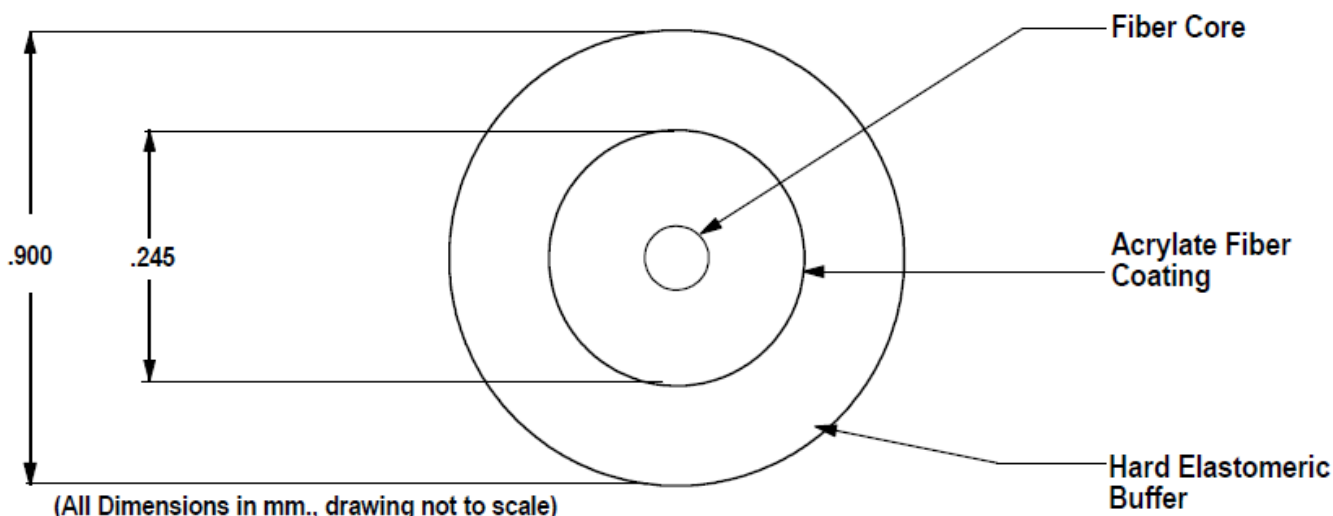
Contact COTSWORKS for mechanical dimensional information.





Fiber Cable Assembly Specifications

- 9/125 μm singlemode, bend tolerant ITU-T G.657.A1
- 245 μm primary coating diameter
- 900 micron secondary buffer diameter
- 1 cm minimum bend radius for fiber optic cable
- Cable epoxy pigtailed and heat-shrink added for strain relief
- Fiber will be terminated to an LC/UPC connector
- Assembly length defined by the measurement from the OSA flange ring to tip of LC ferrule
- Length tolerance defined per DOC#: 944-00061



OSA-RXA	-xx	-C001
Pigtailed ROSA Assembly	Length	1310nm, SM fiber, LC/UPC Connector
	(xx): In Millimeters	

Example part number: OSA-RXA-1000-C001
 [Pigtailed 3Gb/s LX ROSA Assembly, 1000mm length, LC/UPC connector]

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