

4 x 25Gb/s CWDM PIN-TIA ROSA (Preliminary)

TYPE NAME: L-FR-MC99-00

Product Description:

The LuxNet L-FR-MC99-00 100Gbps CWDM PIN-TIA ROSA is designed for 100G Ethernet optical receiver applications. This ROSA use Luxnet PD, TIA(M03100), de-multiplexer, LC receptacle optical connector and two flex printed circuits as electrical interface.

Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	-5	75	Case Temp.
Storage Temperature	T _{stg}	°C	-40	85	
Damage Input Power Threshold, each lane	P _o	dBm	-	5.5	
TIA supply voltage	V _{cc}	V	-0.4	4	
Solder Reflow Temperature	T _{sld}	°C	-	260	10 seconds max.

Electro-Optical Characteristics (T_c = 25°C, V_{cc}=3.3V)

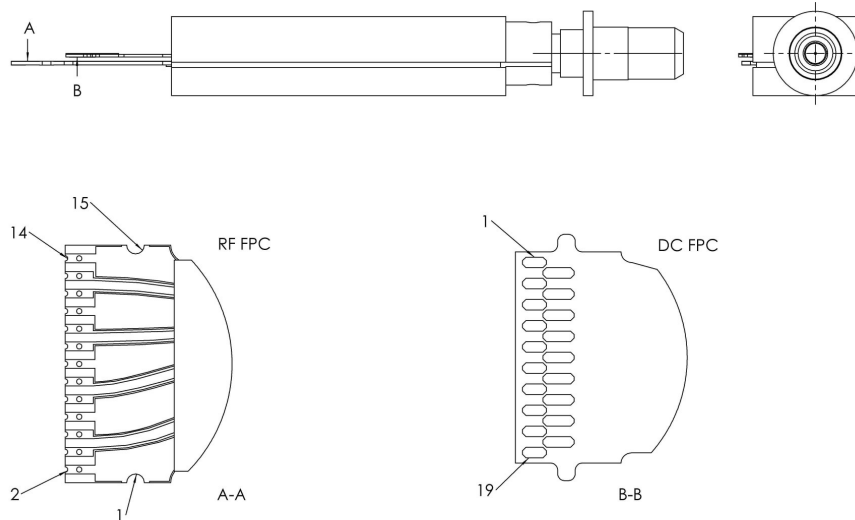
Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Power Supply Voltage	V _{cc}	V	3.1	3.3	3.6	
Supply Current	I _{cc}	mA	-	98	-	V _{cc} = 3.3V
Center Wavelength	Wch-0	nm	-	1271	-	
	Wch-1	nm	-	1291	-	
	Wch-2	nm	-	1311	-	
	Wch-3	nm	-	1331	-	
Center Wavelength Accuracy	Wac	nm	+/-1.0			
Data Rate	DR	Gb/s	25.78			
Low Frequency cut-off	LFC	KHz	-	30	-	
Differential Output Impedance	R	Ω	-	100	-	
Sensitivity pre Lane	S _{avg}	dBm	-	-	(TBD)	PRBS 2 ³¹⁻¹ , BER=1e-12 ER = 10dB
Overload	P _{max}	dBm	-	-	(TBD)	
Optical Return Loss	ORL	dB	-	-	(TBD)	

* Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

Version 1.0

Pads Assignment



Pin Description of DC FPC

Pin Number	Symbol	Description
1	GND	Ground
2	R_EXT	Connected to GND with a 1k-ohm 1% resistor
3	RSSI 0	Analog Output
4	RSSI 1	Analog Output
5,6,7,8,9,10,11,12	GND	Ground
13	RSSI 2	Analog Output
14	RSSI 3	Analog Output
15,16	GND	Ground
17,18	Vcc	Power Supply(+3.3V)
19	GND	Ground

Pin Description of RF FPC

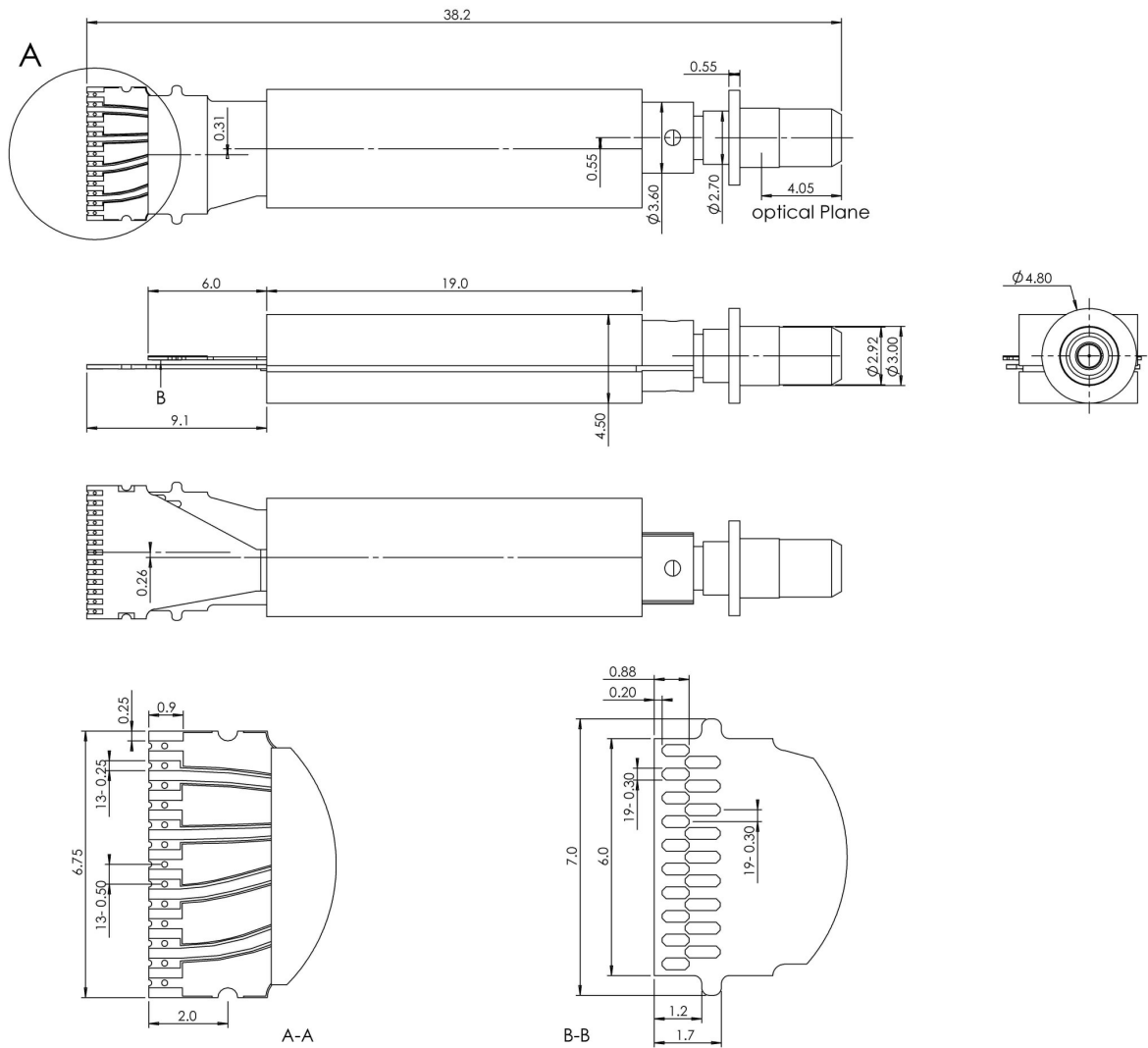
Pin Number	Symbol	Description
1,2	GND	Ground
3	DoutN 0	Negative Data Output, Lane 0
4	DoutP 0	Positive Data Output Lane 0
5	GND	Ground
6	DoutN 1	Negative Data Output, Lane 1
7	DoutP 1	Positive Data Output Lane 1
8	GND	Ground
9	DoutN 2	Negative Data Output, Lane 2
10	DoutP 2	Positive Data Output Lane 2
11	GND	Ground
12	DoutN 3	Negative Data Output, Lane 3
13	DoutP 3	Positive Data Output Lane 3
14,15	GND	Ground

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Mechanical Dimensions

L-FR-MC99-00

Dimensions: (mm)



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