

1310/1550 nm 2.5 G LC ROSA

PL-SLR-00-L23-Cx

**Key Features**

- Data rates up to 2.5 Gbps
- 3.3 V supply
- -40 °C to 85 °C operation
- Differential output
- 5th lead photocurrent monitor function available
- LC connectorized InGaAs PIN/TIA for use in 1310 nm and 1550 nm applications

Benefits

- Direct output of average receive power for intelligent transceiver applications
- Excellent sensitivity
- Fully tested for optimum alignment and performance

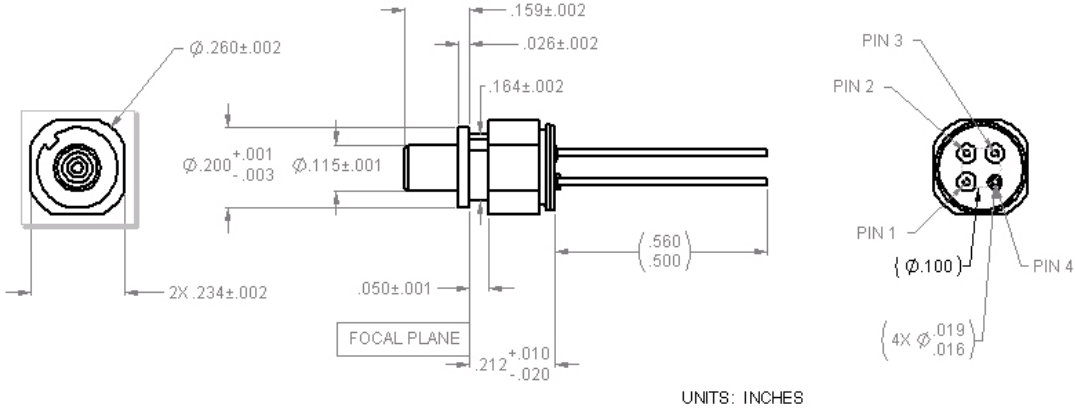
The JDSU 1310/1550 nm 2.5 Gbps LC connectorized ROSA (Receiver Optical Sub-Assembly) is designed for high-speed data communication applications in Fibre Channel, Gigabit Ethernet and ATM/SONET transceiver modules. The product utilizes a high-speed InGaAs PIN/TIA integrated in a TO-46 package aligned to a precision plastic LC barrel. Each part is electro-optically tested to ensure optimum performance and yield in the application.

The PL-SLR-00-L23-Cx converts optical power into an electrical signal at data rates up to 2.5 Gbps and is engineered for performance over extended operating temperature and power conditions with high reliability. Designed for single-mode fiber applications.

2

Mounting Dimensions

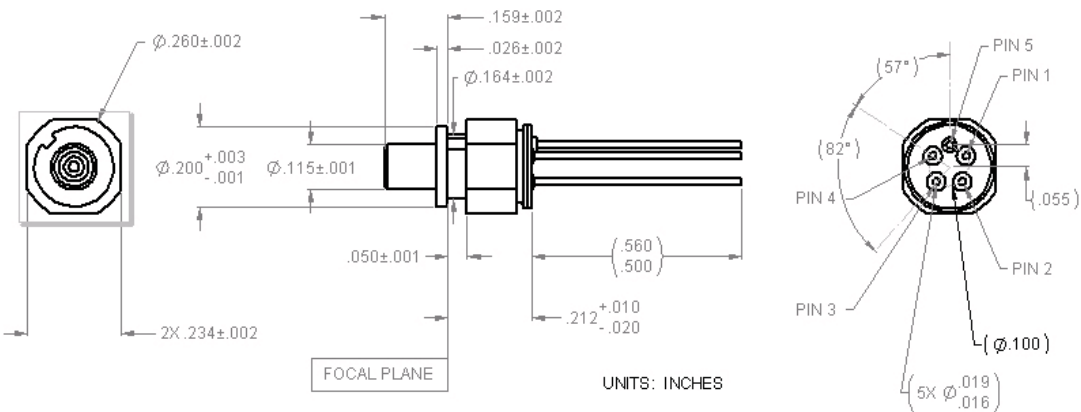
4 Lead Version (PL-SLR-00-L23-C0)



PL-SLR-00-L23-C0

Pin	Symbol	Function
1	Vout-P	TIA Output Voltage (Non-Inverted)
2	Vdd	Positive Supply Voltage
3	Vout-N	TIA Output Voltage (Inverted)
4	GND	Ground, Case

5 Lead Version (PL-SLR-00-L23-C1)



PL-SLR-00-L23-C1

Pin	Symbol	Function
1	Vout-P	TIA Output Voltage (Non-Inverted)
2	Vdd	Positive Supply Voltage
3	Imon	Average Power Monitor Current
4	Vout-N	TIA Output Voltage (Inverted)
5	GND	Ground, Case

***RSSI Pin 3 Connections**

-C1: Connect Pin 3 to ground with a resistor <2500Ω

3

Shipping Information

Shipped in anti-static stackable trays. 50 pieces per tray.

Absolute Maximum Ratings(T_{case} = 30 °C)

Parameter	Symbol	Ratings	Unit
Storage temperature	T _{st}	-40 to +85	°C
Incident optical power	P _{in}	+5	dBm
Lead solder temperature	T _s	260 °C for 10 sec. 2 mm from case	
Power supply voltage	V _P	5.0	V
ESD ¹		Class 1	

Note:

Conditions exceeding those listed may cause permanent damage to the device. Devices subjected to conditions beyond the limits specified for extended periods of time may adversely affect reliability.

1. HBM

Electro-optical Characteristics(T_{case} = -40 °C to 85 °C)

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Wavelength responsivity	λ	910	1310	1650	nm
Case operating temperature	T _{op}	-40		85	°C
Supply voltage	V _{cc}	2.97	3.3	3.63	V
Supply current	I _{cc}		15	20	mA
Bandwidth ¹	BW		1.8		GHz
Low frequency cutoff	BW _{LF}		50		kHz
Responsivity (@50 MHz) ¹	R		1500		V/W
Sensitivity ²	S	-24	-25		dBm
Output resistance	R _o		50		Ω
Optical overload ²		-3.0	0		dBm
Differential output voltage ³	V _{out}		250	300	mV
Deterministic jitter ⁴	DJ		55		ps
Rise/Fall time ³	t _r /t _f		95	160	ps
Optical return loss				-14	dB
Slope of I _{mon} vs P _{in} ⁵	I _{mon} slope		1		A/W
I _{mon} current with zero input ⁵	I _{mon} offset			40	uA
I _{mon} linearity range ⁵	I _{mon} range			0	uA

1. P_{in} = -13 dBm, Rload = 100 Ω (differential)

2. 10⁻¹² BER with a 2⁷-1 PRBS @ 2.125 Gbps

3. 2⁷-1 PRBS @ 2.125 Gbps, P_{in} = -3 dBm, Rload = 100 Ω (differential)

4. 6σ about the center eye crossing, P_{in} = -17 dBm

5. Average current

Order Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: PL-SLR-00-L23-C0

Part Number	Description
PL-SLR-00-L23-C0	1310/1550 nm 2.5 G LC ROSA, low power
PL-SLR-00-L23-C1	1310/1550 nm 2.5 G LC ROSA, low power with average power monitor