10Gbps InGaAs PIN-TIA Photodiode Receptacle LC TOSA
R13-10G-RLC1-36

Data Sheet

Overview

The Lasermate R13-10G-RLC1-36 is a high speed, 10Gbps, high responsivity, 1260-1620nm wavelength spectral range, InGaAs photodiode, LC receptacle with flexible circuit designed for use in fiber optic data communication applications.

Features

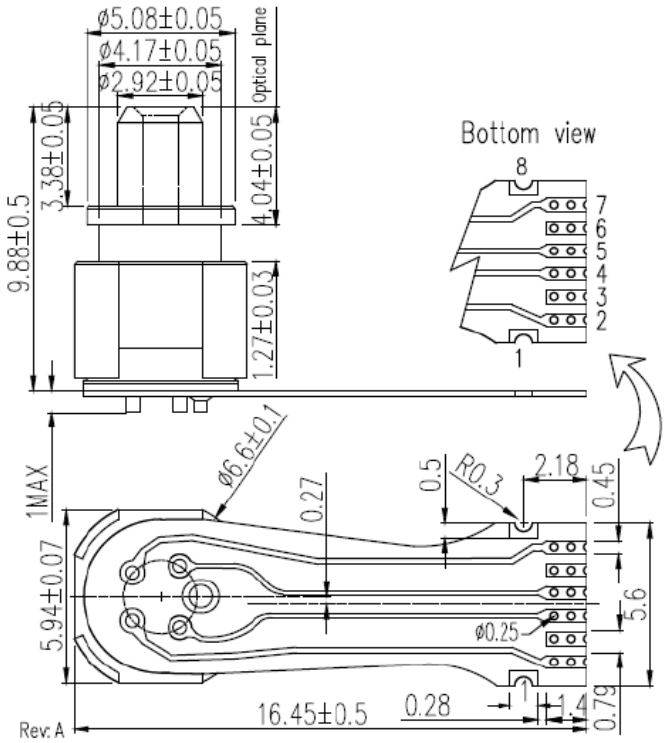
- LC-type optical submodule with flexible circuit attached
- Design for Small Form Factor transceivers
- Design for long wavelength 10.3Gbps application
- Photocurrent monitoring available
- Single power supply +3.3V

Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	100	°C	
Operating Temperature	-40	85	°C	
Lead Solder Temperature		260	°C	10 seconds
Flex Attach Temperature		370	°C	10 seconds

Electro-Optical Characteristics (T_A = 25°)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power Supply	V_{CC}	3.0	3.3	3.6	V	
Supply Current	I_{CC}	29	32	37	mA	No loads
Differential Responsivity	R_d	1.2	2.0	3.2	mV/uW	R_{load}=100ohm, P=-15dBm, λ=1310nm
Single Ended Responsivity	R_s	0.6	1.0	1.6	mV/uW	R_{load}=50ohm, P=-15dBm, λ=1310nm
TIA RSSI – Slope			0.9	1.0	1.1	mA/mA	
TIA RSSI – Offset				0.0	100	uA	
TIA RSSI – Linearity Limit					2.0	mA	
Small-Signal Bandwidth	BW	6.0	7.0		GHz	P=-15dBm	
Low-Frequency Cut off	LF		0.5	2.0	kHz		
Saturation Power	P_{Sat}	0.5			dBm		
Single Ended Output Impedance	R_O		50		ohm		
Wavelength	λ	1260		1620	nm		
Sensitivity				-14.5	dBm	λ=1310nm @10.3125Gbps, PRBS31, ER=4.5dB, BER=1E-12	

Outline Dimensions (unit: mm)



Pin Configuration

Pin Number	Function
1	Gnd
2	Vcc
3	Gnd
4	Dout(+)
5	Dout(-)
6	Gnd
7	Isource
8	Gnd

Note: Specifications are subject to change without notice.