

25G 1310/1550nm PIN-TIA 5pin TO-33

L-TR-IM99-xx Series

Ver. : 1.1

Type Name: L-TR-IM99-33

Product Description:

The LuxNet L-TR-IM99-33 is designed for high-speed, high-performance data communication applications. This device integrates our high-speed 1310nm PIN detector with a 25G trans-impedance amplifier (TIA) and capacitors into a TO-33 header with flat window cap. The PIN-TIA assembly can be integrated with a fiber receptacle housing to receive light from fiber through a receptacle into the PIN detector with high coupling efficiency.

Product Specifications:

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	Top	°C	-40	85	Case Temp.
Storage Temperature	Tstg	°C	-40	85	
TIA supply voltage	Vcc	V		4	Tc = 25°C

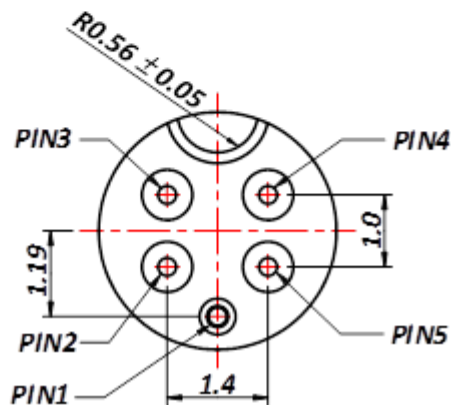
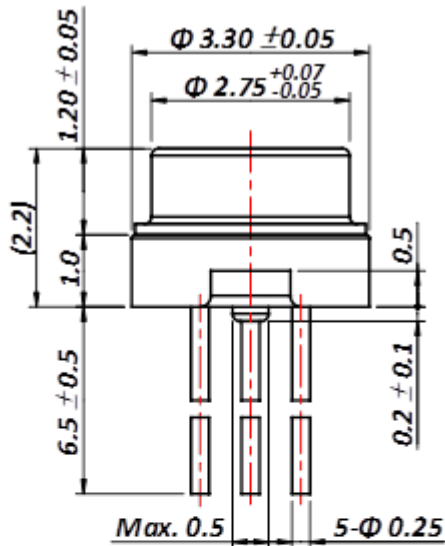
Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Power Supply Voltage	Vcc	V	2.90	3.30	3.63	
Supply Current	Icc	mA		24	30	Vcc=3.3V, no light
Wavelength	λ	nm	1260	1310	1620	
Bit Rate Selection (25G)	RSSI _{VI}	V	0	-	1.1	RSSI input
Bit Rate Selection (10G)			1.4	-	3.3	
Low Bandwidth (-3dB)	L _{BW}	kHz	-	60	-	
RSSI slope	RSSI _{SE}	A/A	-	1:2	-	
Responsivity	Res	A/W	0.8	-	-	
Sensitivity	Sen	dBm	-	-	-12.0	ER=4.0dB, 25.78Gbps PRBS 2 ³¹ -1,BER=1E-12
			-	-	-14.0	ER=4.0dB, 10.3125Gbps PRBS 2 ³¹ -1,BER=1E-12

*All specifications or information contained herein are subject to change for improvement without notice.
 Further details are available from any LUXNET sales representative.*

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Overload	Pmax	dBm	+2.5	-	-	ER=4.0dB, 25.78Gbps PRBS 2^31-1, BER= Error free
			+2.5			ER=4.0dB, 10.3125Gbps PRBS 2^31-1, BER= Error free
Output impedance	Rout	Ω	-	50	-	Singe Ended

L-TR-IM99-33
Dimension: (mm)

All dimensions are nominal


PINOUT (Bottom View)	
PIN NUMBER	FUNCTION
1	GND
2	D-
3	Vcc
4	RSSI
5	D+

*All specifications or information contained herein are subject to change for improvement without notice.
 Further details are available from any LUXNET sales representative.*

Document History

Version	Date (MM/DD/YYYY)	Notes
1.0	10/06/2022	Initial
1.1	09/13/2023	Modify the dimensional tolerance of 3.3+/-0.05mm

*All specifications or information contained herein are subject to change for improvement without notice.
Further details are available from any LUXNET sales representative.*