

25G 1310/1550nm APD-TIA 5pin TO-46 (Preliminary)

L-TR-IA99-xx Series

TYPE NAME: L-TR-IA99-03

Product Description:

The LuxNet L-TR-IA99-x is designed for high-speed, high-performance 25G Ethernet applications. This device integrates our high-speed 1310nm APD detector with a 25G trans-impedance amplifier (TIA) and capacitors into a TO-46 header with cap window.

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	-0.5	4.0	Tc = 25°C
APD Reverse Current	Ir	mA	-	1.0	
Optical Power	Pin	dBm	-	-5	
APD supply Voltage	Vpd	V	-	Vbr	
Solder Reflow Temp.	Tsrt	°C	-	270	10sec Max.

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

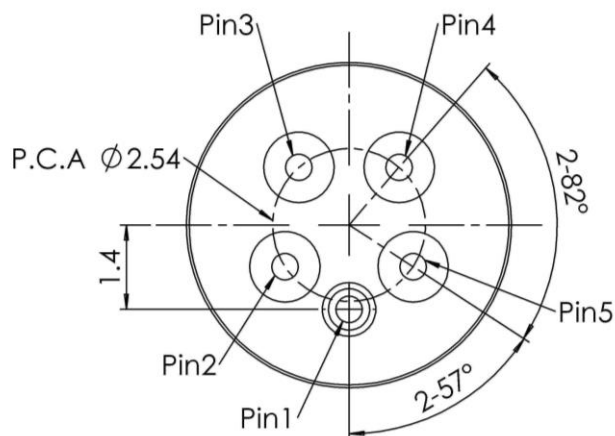
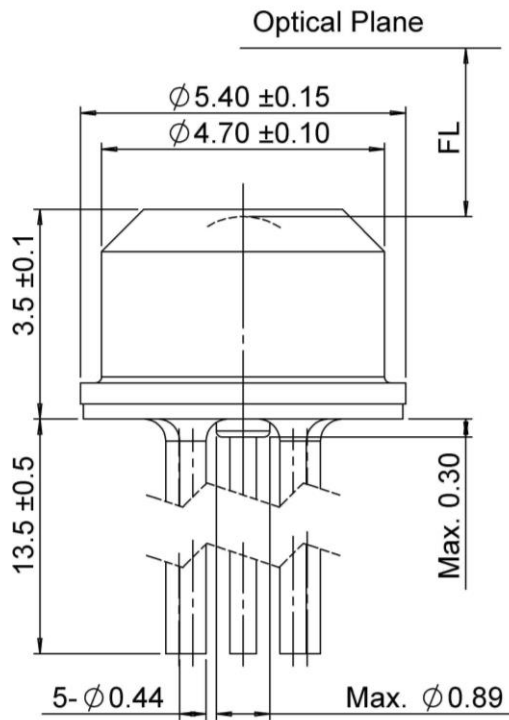
Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Power Supply Voltage	Vcc	V	2.97	3.3	3.53	
Supply Current	Icc	mA	-	29	-	Vcc=3.3V, no light
Breakdown Voltage	Vbr	V	22	27	30	I=10uA
Operation Voltage	Vop	V	-	Vbr-4	-	
Dark Current	Idark	nA	-	-	150	Vbr-4
Wavelength	λ	nm	1260	1310	1620	
Low Bandwidth (-3Db)	L _{BW}	kHz	-	-	100	
Sensitivity	Sen	dBm	-	-	-21.0	ER=4.5dB, 25.78Gbps PRBS 2 ³¹ -1, BER=5E-5
Overload	Pmax	dBm	-2	-	-	ER=4.5dB, 25.78Gbps PRBS 2 ³¹ -1, BER= Error free

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Focal Length	FL	mm	-	2.5	-	

L-TR-IA99-03

Dimensions: (mm)

All dimensions are nominal



PINOUT(BOTTOM VIEW)	
PIN NUMBER	FUNCTION
1	GND
2	D+
3	VCC
4	VAPD
5	D-