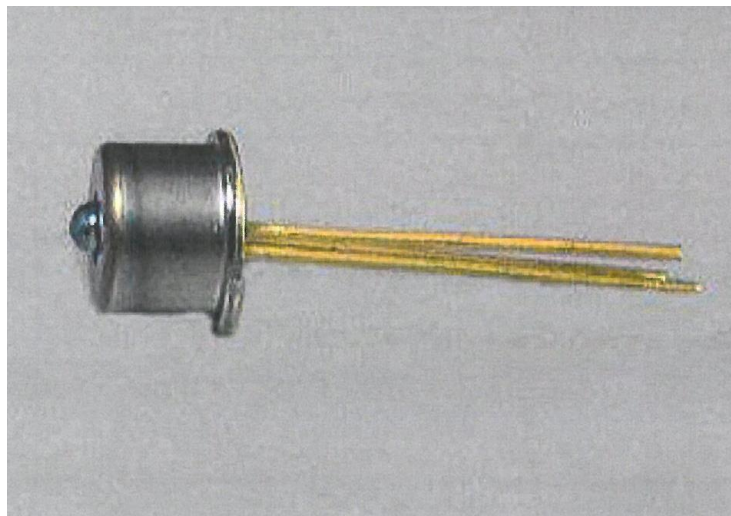


InGaAs 50um APD Photo Diode Modules



- Low Noise
- Low Dark Current
- High Speed 2.5 Gb/s
- Lensed TO46 Package
- 50um Active Area
- RoHS Compliant
- Applications:
 - OTDR Receiver
 - Line Receivers
 - Long Haul

The LAPD 1550-50R is a 50um InGaAs APD housed in a hermetic 3 pin lensed TO46 package. The low dark current APD makes the devices ideal for OTDRs, line receivers and any other low light level signal detection application.

APD Specifications (Performance @ 25°C)

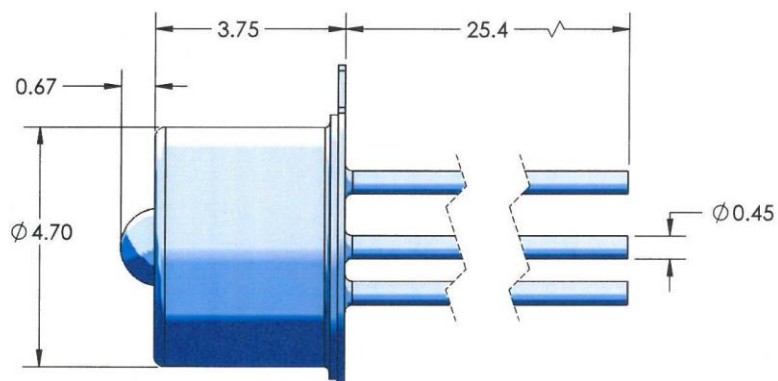
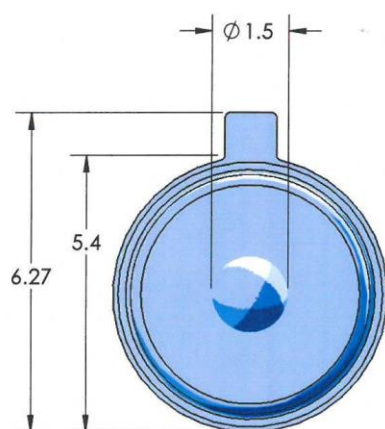
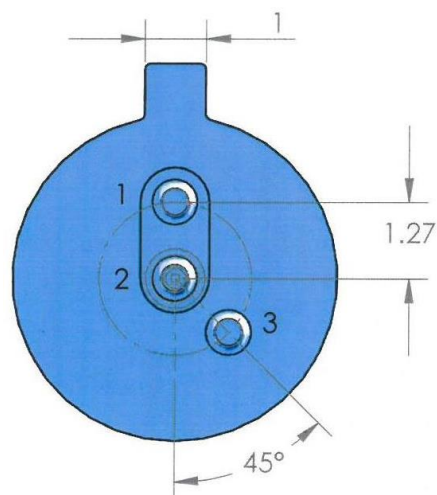
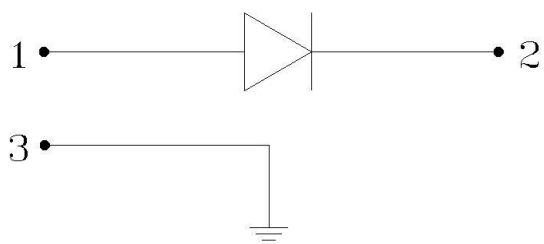
Absolute Maximum Ratings:

Symbol	Parameters	Conditions	Value	Unit
I_r	Reverse Current	-	1	mA
T_{op}	Operating Temperature	-	-40 ~ +85	°C
T_{stg}	Storage Temperature	-	-40 ~ +100	°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Active Area	A	Diameter		50		μm
Breakdown Voltage	V_{BR}	$I_r = -100\mu\text{A}$	50	60	75	V
Dark Current	I_d	$V_r = 0.9 \times V_{BR}$	-	1	25	nA
Responsivity	R_λ	$M = 1, \lambda = 1550\text{nm}$	-	0.9	-	A/W
		$M = 10, \lambda = 1550\text{nm}$	-	9	-	A/W
Capacitance	C_t	$V_r = 0.9 \times V_{BR}, f = 1\text{MHz}$	-	0.5	0.7	pF
Rise Time	t_r	$M = 10, \lambda = 1550\text{nm}, R_L = 50\text{ Ohm}$	-	0.14	0.19	ns
Bandwidth	f_{3dB}	$M = 10, \lambda = 1550\text{nm}, R_L = 50\text{ Ohm}$	1.8	2.5	-	GHz

Outline Drawing

Electrical schematic



Ordering Information: LAPD 1550-50R

Products can be ordered directly from Laser Diode Inc. or its representatives.
For a complete listing of representatives, visit our website at www.laserdiode.com.
When ordering, please refer to the numbering diagram below.

Personal Hazard and Handling Precautions:
ESD precautions apply.

Warranty:
Please refer to your product purchase agreement for complete details or check with your Laser Diode sales representative.

Notice:
Laser Diode Inc. reserves the right to make changes to the products or information contained herein without notice. No liability is assumed as a result of their use or application.