

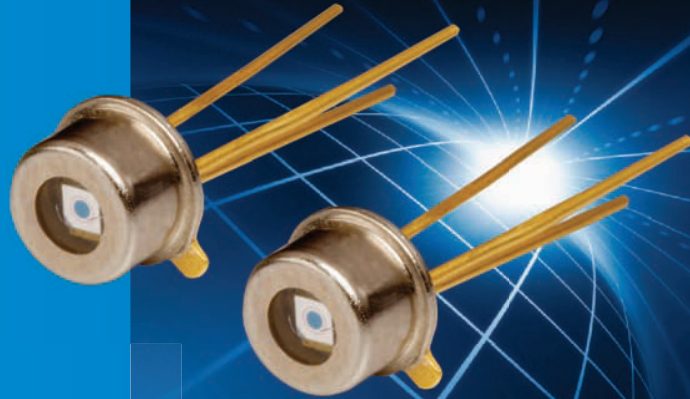
# Large Area InGaAs APD Module

ISO 9001:2008 Certified

- Low Noise
- High Sensitivity
- 200um Active Area
- Standard TO46 Package
- RoHS Compliant

### Applications:

Range Finding  
Sensors  
OTDRs

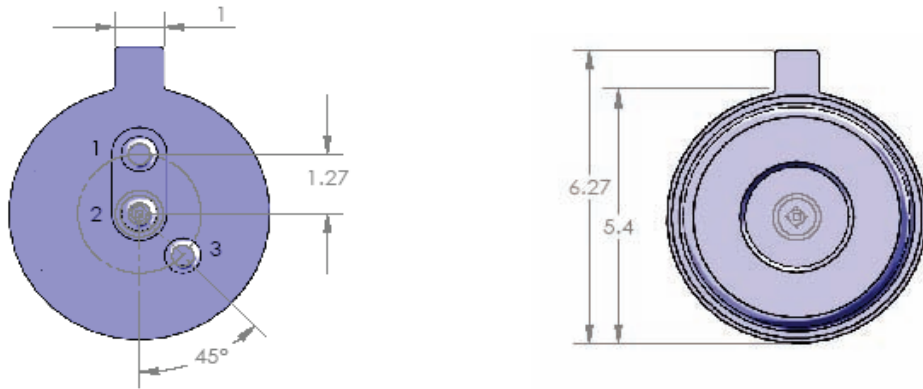


The LAPD 1550-200R is a 200um InGaAs APD housed in a hermetic 3 pin TO46 Package. The low noise and high sensitivity of the LAPD 1550-200R APD make it ideal for use in range finding, sensors, OTDRs and any other low light level detection application.

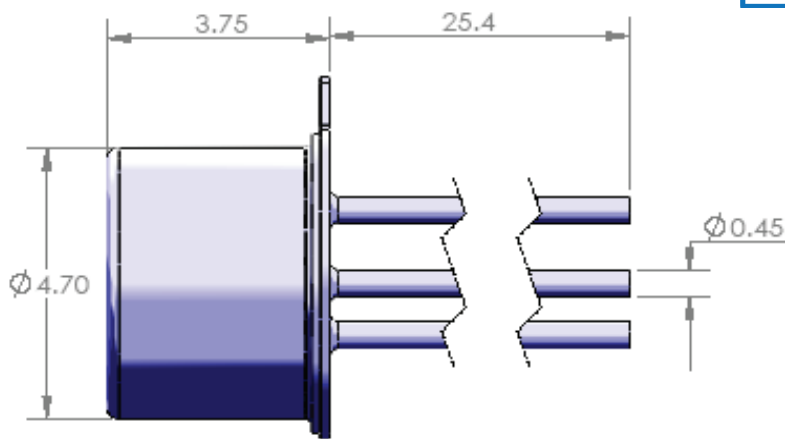
### Characteristics ( $T_{amb} = 25^{\circ}\text{C}$ )

PARAMETERS	SYMBOL	CONDITIONS	Min	Typ	Max	Units
Active Area Diameter	$\varnothing$			200		$\mu\text{m}$
Operational Wavelength	$\lambda$		800		1700	nm
Peak Responsivity Wavelength	$\lambda_p$			1550		nm
Responsivity	R	$\lambda = 1550\text{nm}, M = 1$	0.7	0.75		A/W
Dark Current	I	$M = 10$		20	24	nA
Breakdown Voltage	$V_{br}$	$I_d > 100 \mu\text{A}$	30	37	40	V
dV / dT	$\Gamma$		15	17	19	mV / $^{\circ}\text{C}$
Capacitance	$C_T$	$f = 1 \text{ MHz}, M > 3$		4		pF
Bandwidth	$f_{3\text{db}}$	$RL = 50\Omega, 3 < M < 10$		200		MHz
Excess Noise Factor	$NEF$	$M = 10$		3.5		
Noise Equivalent Power	NEP	$\lambda = 1550\text{nm}, M = 10$		$4.97 \times 10^{-14}$		$\text{W} / \text{Hz}^{0.5}$
Absolute Max Reverse Current	$I_r$				3	mA
Max Forward Current	$I_f$				5	mA
Operating Temperature Range	$T_{op}$		-40		85	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$	Non operating	-40		85	$^{\circ}\text{C}$

## Outline Drawing



PINOUT TABLE	
PIN No.	Description
1	Anode
2	Cathode
3	Ground



Dimensions: mm

## Ordering Information

Products can be ordered directly from OSI Laser Diode, Inc. or its representatives.  
 For a complete listing of representatives, visit our website at  
[www.laserdiode.com](http://www.laserdiode.com)

When ordering, refer to model number **LAPD 1550-200R**

### Personal Hazard and Handling Precautions:

ESD precautions apply.

### Warranty:

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

### Notice:

OSI 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.