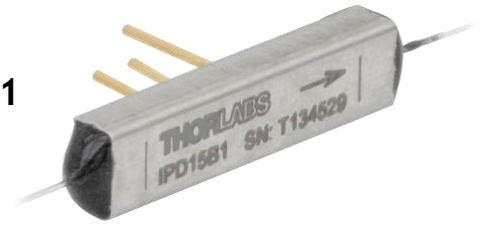
C and L-Band Inline Photodetectors, 1% Tap Ratio

IPD15x1



Description

Thorlabs' IPD15x1 Inline Photodetectors offers real-time optical power monitoring with minimal signal disruption. Their innovative tap design captures a small portion of the optical signal without compromising fiber continuity or signal integrity. The photodiode current from the tap port is proportional to the optical output power of the fiber.

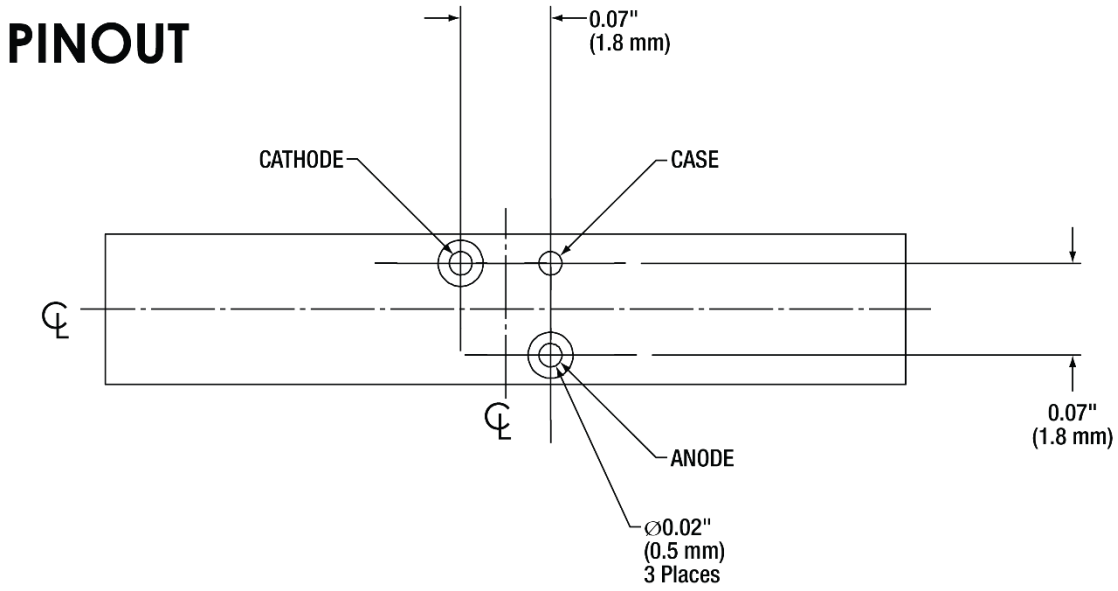
Specifications

General Specifications		
Wavelength Range		1520 – 1630 nm
Design Wavelength		1550 nm
Tap Ratio		1% ± 0.5%
Insertion Loss		0.04 dB ±0.02 dB
Responsivity at 1% Tap Ratio[a]		9.5 mA/W
Polarization Dependent Responsivity (PDR)[b]		≤0.2 dB
Polarization Dependent Loss (PDL)		≤0.1 dB
Directivity[c]		≥24 dB
Max Optical Power		250 mW
Optical Return Loss (ORL)		≥55 dB
Spectral Dependence Responsivity		0.0053 dB/nm
Fiber		0.8 m +0.075 m/-0.0 m
Connectors	IPD15B1	No Connectors, Scissor Cut
	IPD15A1	2.0 mm Narrow Key FC/APC
	IPD15F1	2.0 mm Narrow Key FC/PC

a. Ratio of Photocurrent to Optical Output Power, Dependent on Tap Ratio
b. Maximum Change in Responsivity with Polarization
c. Ratio of Forward Directed Light Relative to Backward Directed Light

Detector and Fiber Specifications	
Fiber	SMF-28
Dark Current @ -5 V, 23 °C (Typ.)	8 nA
3dB Bandwidth @ -5 V	330 MHz
Capacitance (Typ.)	15 pF
Forward Current (Max)	25 mA
Reverse Current (Max)	5 mA
Reverse Voltage (Max)	20 V
Operating Temperature	-5 to 75 °C
Storage Temperature	-40 to 85 °C
Pinout	TO-18

Pin Layout


PINOUT
0.07"
(1.8 mm)
CATHODE
CASE
0.07"
(1.8 mm)
ANODE
Ø0.02"
(0.5 mm)
3 Places