



DEVICE

# InGaAs PIN Photoreceiver, 3 GHz

## OVERVIEW

The Optilab PR-3 PIN preamplifiers use an InGaAs PIN chip with GaAs IC preamplifier. The package is designed for a horizontal PC board mount. Each package is connected with multi-mode fiber and it provides data rate up to 2.5 Gb/s. The detector preamplifier is DC coupled and has a low electrical output when the PIN is illuminated. Contact Optilab for more details

**FEATURES** 

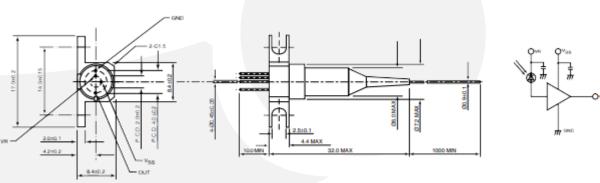
- 3 GHz Bandwidth
- High Responsivity: 0.85A/W @1550nm
- InGaAs PIN Pre Amplifier

**USE IN** 

- Optical Transmission Systems
- Optical Communication

• Test and Measurement

### MECHANICAL DRAWING (unit: mm)







#### **GENERAL**

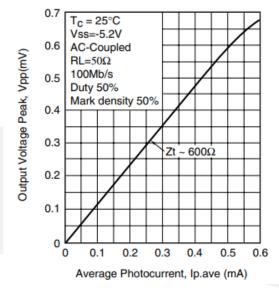
Responsivity	0.85 A/W min @ 1310nm 0.85 A/W min @ 1550nm
Sensitivity	-23 dBm typ.
Bandwidth	3 Ghz typ.
AC Transimpedance	$600\Omega$
Equivalent Input Noise Current Density	7 pA/Sqrt(Hz) typ.
Sensitivity	-23 dBm typ.
Maximum Overload	-3 dBm min.
Reverse Voltage	15 V typ.
Power Supply Current	35 mA typ.
Power Supply Voltage	-5.0 V typ.

### ABSOLUTE MAXIMUM

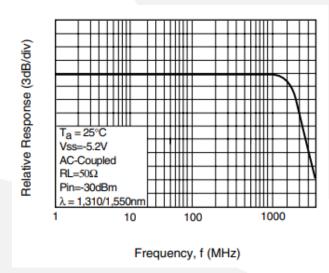
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C
Minimum Supply Voltage	-7V
Maximum Supply Voltage	OV
Minimum PIN Reverse Voltage	OV
Maximum PIN Reverse Voltage	2 D V
PIN Reverse Current	2 mA



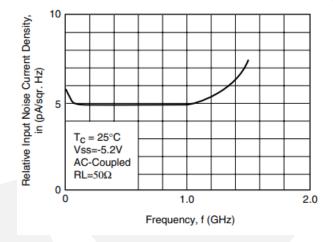




[Output Characteristics]



[Relative Frequency Response]



[Equivalent Input Noise Current Density]





• PD-3



The Optilab PD-3 is an Linear InGaAs PIN photodiode with a multimode fiber pigtail with bandwidth of 3 GHz. Contact Optilab for more detail.

#### RELATED MODULE

• PR-3-M



The Optilab PR-3-M is a 3 GHz photodiode module designed for RF over Fiber application with RS232 remote control. Contact Optilab for more detail

