## **OSI** LaserDiode, Inc.

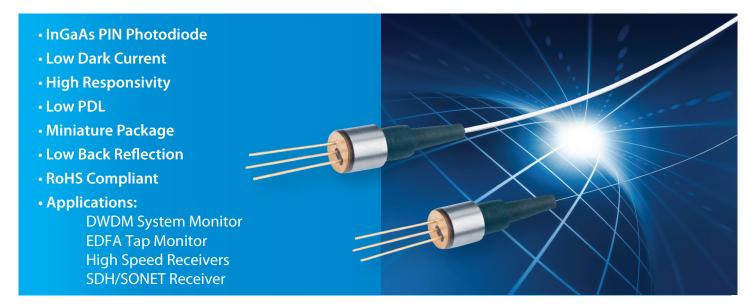
An OSI Systems Company

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### www.laserdiode.com

# InGaAs PIN Photodiode Modules for Telecom Applications

ISO 9001:2008 Certified



The OSI Laser Diode Inc. InGaAs PIN detector provides both small size and high performance in a miniature coaxial module. Designed to provide high responsivity and low leakage, LDI's detector modules exhibit low back reflection along with low polarization dependent loss (PDL). The detector module offers high reliability satisfying TELCORDIA GR-468-CORE. The LPD 3080 coaxial devices are available with either a 245um or 900um jacketed fiber and are available at two back reflection levels.

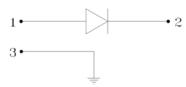
#### PIN Monitor Specifications (Performance @ 25°C and -5V)

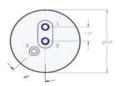
PARAMETERS	SYMBOL	Min	Тур	Max	Units
<b>Detector Diameter</b>	Ø		75		μm
Dark Current	Id		0.05	0.5	nA
Capacitance	Cj		0.5	0.75	pF
Responsivity @ 1.3 um	R	0.8	0.85		A/W
@ 1.55 um	R	0.85	0.9		A/W
Optical Back Reflection			See Table Below		dB
PDL				0.15	dB
Input Power				10	dBm
Bandwidth (RL = $50\Omega$ )	f₃db		2.5		GHz
Operating Temperature Range	Тор	-40		85	°C
Storage Temperature	$T_{stg}$	-40		85	°C

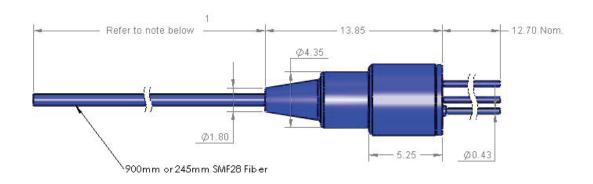
#### **Outline Drawing**

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

#### Electrical schematic







Note 1: Standard fiber length: 1 meter minimum

**Dimensions: Millimeters** 

Detailed package drawings are available on LDI website.

Absolute Maximum Ratings						
		Units				
Reverse Voltage	20	V				
Forward Current	10	mA				
Reverse Current	10	mA				

#### **Model Number Table**

Some products can be supplied with performance characteristics that will meet special customer requirements and that are different from those indicated herein.

Model#*	Fiber Type	Nominal Fiber Size (um)	Cladding Tolerance	Back Reflection Level (dB)
LPD 3080-PM1	Corning SMF 28-CPC6	9/125/245	125 +/- 1.0um	-40
LPD 3080-PM2	Corning 900um TBII	9/125/245/900	125 +/- 1.0um	-40
LPD 3080-PM3	Corning SMF 28-CPC6	9/125/245	125 +/- 1.0um	-27
LPD 3080-PM4	Corning 900um TBII	9/125/245/900	125 +/- 1.0um	-27

<sup>\*</sup>Adding "F" suffix to any part number specifies a board mount flange. Connector Options available.

## 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

#### Personal Hazard and Handling Precautions:

Handle optical fiber with normal care, avoiding stretch, tension, kink or bend abuse. 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.