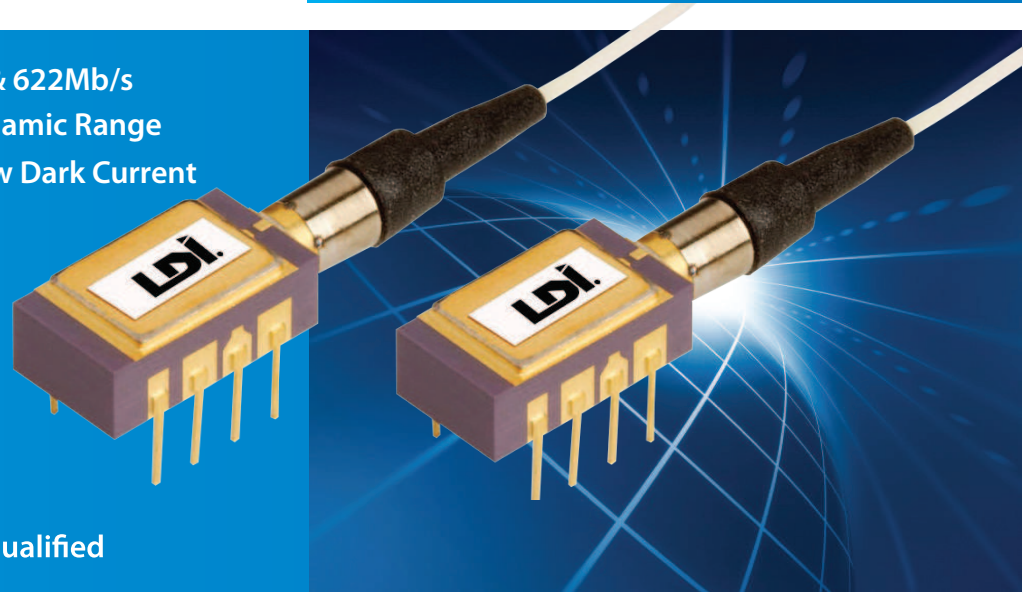


- 4Mb/s, 52Mb/s, 155Mb/s & 622Mb/s
- High Sensitivity/Wide Dynamic Range
- High Responsivity and Low Dark Current  
InGaAs Pin Detector

- Single Supply Capable
- Hermetic Package
- GR-468-CORE Telcordia Qualified



**Applications Include:** Supervisory channel • Long haul transmission networks • Short haul transmission networks • **DWDM** transponders • **SDH/SONET** single mode applications • Instrumentation and testing • Data communications.

### Specifications and Limits

#### Performance @25°C (+/-5.0 VDC)

PARAMETER	UNIT	4 Mb/s			52Mb/s			155 Mb/s			522 Mb/s		
		min	typ	max	min	typ	max	min	typ	max	min	typ	max
Data Rate	Mb/s	4			52			155			622		
Sensitivity @ 10 <sup>-9</sup> (BER)*	dBm	-50	-48		-43	-41		-39	-37		-33	-31	
Overload @ -5 VDC	dBm	-4			0			0			0		
Transfer Gain @ 1310 nm	V/W	40K			25K			12K			4K		
Dark Current @ -5 VDC	nA	0.5			0.5			0.5			0.5		
Responsivity @ -5 VDC	A/W												
@1310 nm	A/W	0.85			0.85			0.85			0.85		
@1550 nm	A/W	0.9			0.9			0.9			0.9		
Output Impedance	Ohms	30		60	30		60	30		60	30		60
Supply Voltage	V	4.75		5.25	4.75		5.25	4.75		5.25	4.75		5.25
Supply Current	mA	30			30			30			30		

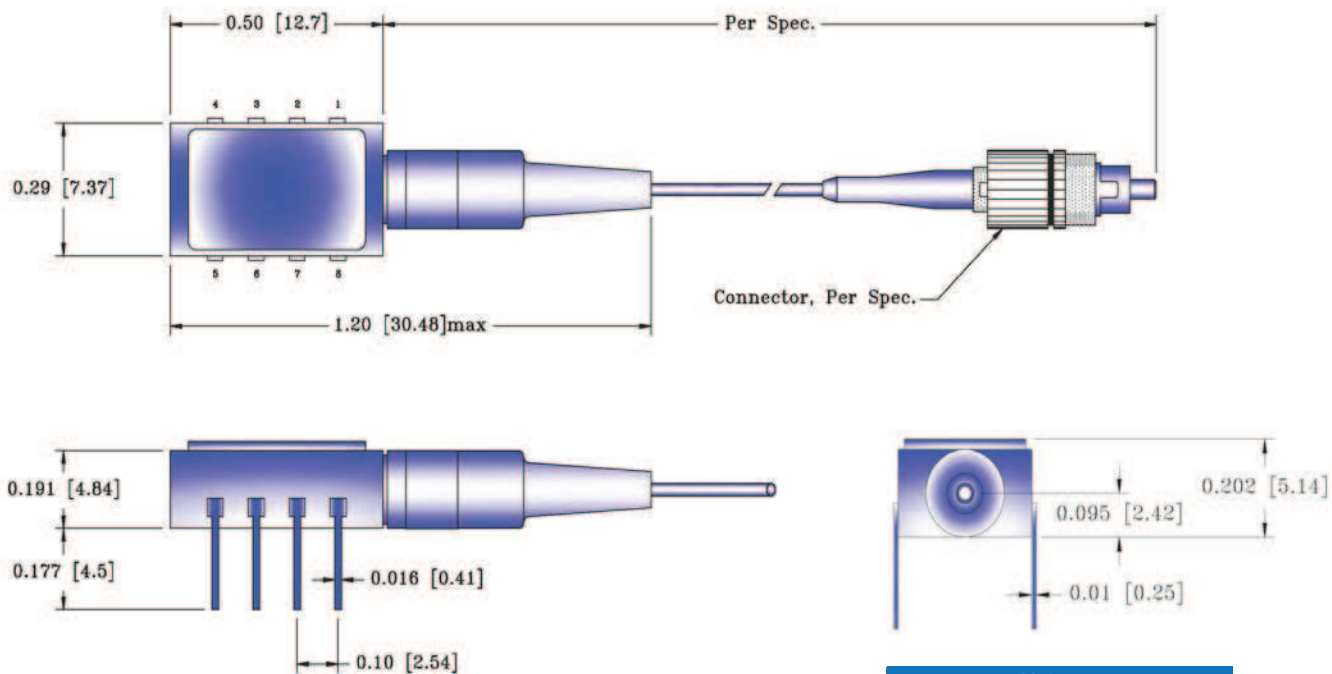
\*Sensitivity is calculated using the noise voltage measured at 25°C at the output of a 3-pole Butterworth filter.  
 Sensitivity is specified as the average optical power in dBm measured at 1310nm and T<sub>a</sub> = 25°C for a BER of 10<sup>-9</sup>.

### Fiber Specifications

Fiber Type	Index Profile	N/A	Nominal Size (um)	Cladding Tolerance (um)	900 um Buffer Material	Fiber Yield Strength (N)	Fiber Bend Radius min. (mm)
Multimode tight buffer	Graded	0.2	50/125/245/900	125+/-2.0	Hytrell	10	30

Other fiber types are available. Please contact the OSI Laser Diode Sales Department or your local LDI representative.

## Outline Drawing



PIN ASSIGNMENT	
Pin No.	Description
1	-5 Volt Det Bias*
2, 3, 5, 6, 8	Gnd
4	Output
7	+5 Volts

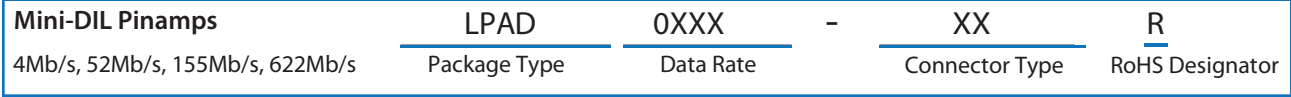
\*0V Det Bias Capable

Absolute Maximum Ratings		
	Units	LPAD Series
Operating Temperature	°C	-40 to +85
Storage Temperature	°C	-40 to +85
Positive Supply Voltage	V	+5.5
Detector Bias	V	-10
Soldering time at 260°C	secs	10

Dimensions: inches [mm]  
 Detailed package drawing is available upon request  
 Standard fiber lengths: 1m min unconnectorized; 1m +/- 0.1m connectorized

## Part Numbering Diagram

When ordering, refer to the numbering diagram below.



**EXAMPLE:** LPAD 0622-FC  
 Mini-DIL Pinamp at 622 Mb/s with FC connector

**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)

**Personal Hazard and Handling Precautions:**  
 Handle optical fiber with normal care, avoiding stretch, tension, twist, 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.