

30um InGaAs APD Coaxial Photodiode Module



- 30um Active Area
- Low Noise
- High Sensitivity
- High Speed
- Miniature Package
- Low Back Reflection
- RoHS Compliant
- Applications:
 - OTDR Receiver
 - Supervisory Channel Rx
 - High Speed Receivers
 - SDH/SONET Receiver

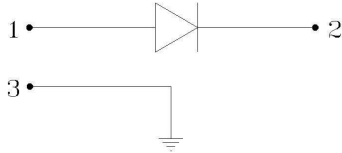
The OSI Laser Diode Inc LAPD 3030-SMR is a 30um InGaAs APD housed in a 3 pin coaxial package coupled to an SMF pigtail. The low noise, high sensitivity and broad Vbr curve make LAPD 3030-SMR ideal for OTDR's, range finders, and high sensitivity line receivers. Other breakdown voltage ranges available on request. The LAPD 3030 coaxial devices come standard with a 900um buffered fiber but a 245um coated type is available on special order. The LAPD 3030 devices are RoHS compliant.

APD Specifications (Performance @ 25°C)

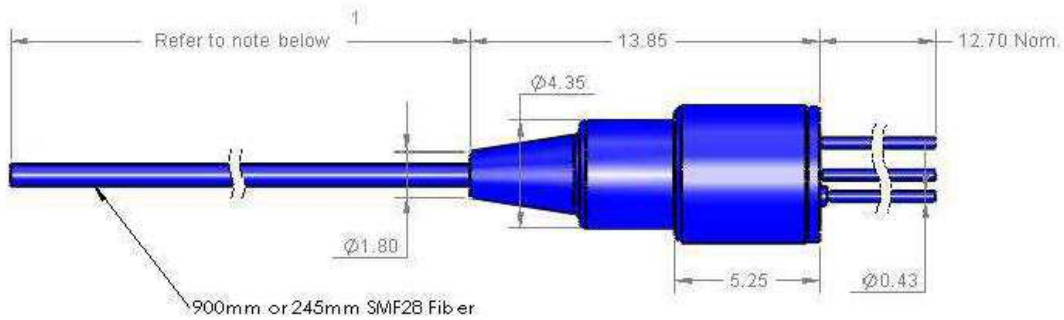
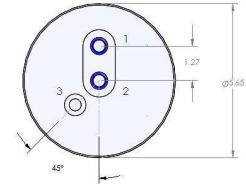
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Active area diameter	D_A			30		μm
Operational wavelength	λ_O		1260	1550	1650	nm
Responsivity	R_{10}	$\lambda = 1550\text{nm}, M=1$	0.9	1		A/W
Dark Current	I_r	$V=0.9 \cdot V_{BR}$		30	50	nA
Breakdown Voltage	V_{br}	$I_d = 10 \text{ uA}$	40	43	46	V
Operating Voltage	V_{op}	optimum		V_{br-3}	V_{br-2}	V
dV_{br} / dT	Γ		0.06	0.07	0.08	V / °C
Capacitance	C_T	$f = 1 \text{ MHz}, M = 9$		0.3		pF
Bandwidth	BW	$M=10$	3	3.25		GHz
Absolute Max Reverse Current	I_{ra}				3	mA
Max Forward Current	I_{fa}				2	mA
Operating temp. range	T_{op}		-40		85	°C
Storage temp. range	T_{stg}	Non operating	-40		85	°C

Outline Drawing

Electrical schematic



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



Note 1: Standard fiber length: 1 meter minimum
 Dimensions: Millimeters
 Detailed package drawings are available on LDI website.

Additional Information

Some products can be supplied with performance characteristics that will meet special customer requirements and that are different from those indicated herein. Products can be ordered directly from 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, twist, kink or bend abuse. ESD precautions apply.

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

Notice:
 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.