



PDIND055FC21-M-0 InGaAs Detectors for Fiber Optics
PDIND055SC21-M-0

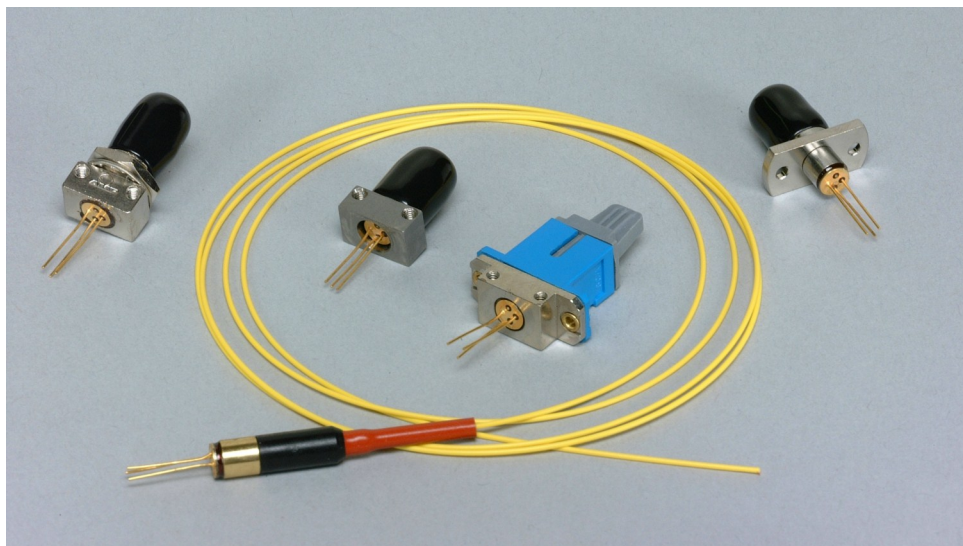
PD-LD Inc. offers a variety of standard and custom PIN Photodiodes and APDs in fiber coupled packages. The semiconductors offered are of proven manufacture and design. Our Silicon devices cover the optical spectrum from 400 to 1100nm, InGaAs is optimal from 1100 to 1650nm and Germanium is suitable from 800 to 2100nm. All devices are available in fiber pigtailed co-axial packages or in connector style receptacle packages.

Pigtailing

Devices can be pigtailed with any size optical fiber that is compatible with its active area size. Pigtails may range in core size from 3um to 100micron. One meter is the standard length, but any length or connector termination may be specified. Pigtails may be terminated with ST, FC, SC and LC connectors with either PC or APC polish.

Receptacles

Standard ST, FC and SC housings are available in both panel and board mountable versions. These receptacles can be optimized for use with both single mode and multimode optical fibers.



Low Back Reflection Assemblies

For those applications requiring low optical back reflection, PD-LD offers a series of fiber pigtailed InGaAs detectors. Typically, 55 um or 75um InGaAs detectors are aligned to angle-polished, radially tuned fiber pig-tails, in order to minimize incident reflected light. With this process, back reflection values from -40 to -50dB maybe specified. Such devices are ideal for CATV, tap monitor and high speed digital applications.

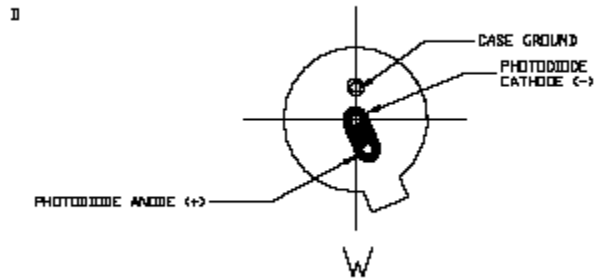
Manufacturing

PD-LD Inc. maintains a large inventory of the most popular detector sizes and pin-outs. Efficient package designs and manufacturing processes allow PD-LD to rapidly support both small and large volume requirements. Complete 100% testing of all critical parametric device values ensure optimal performance and quality. Not all receptacle packaging styles are represented on this data sheet, so please contact PD-LD for specific needs.

PD-LD Part Number	Active Area (µm)	Response 1310nm (A/W)		Response 1550nm (A/W)		Capacitance (pF)		Dark Current (nA)		Bandwidth -3dB (GHz)	Pin-Out
		Min.	Typ.	Min.	Typ.	Typ.	Max	Typ.	Max		
InGaAs (@ 5V bias, 1300nm Laser Source, except as note, 25°C, tested with 9/125um SMF)											
PDIND055FC21-M-0 PDIND055SC21-M-0	55	0.65	0.8	0.7	0.9	0.55	0.75	0.2	0.6	3.5	W

**PDIND055FC21-M-0 InGaAs Detectors for Fiber Optics
PDIND055SC21-M-0**

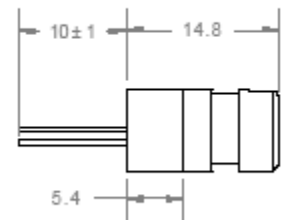
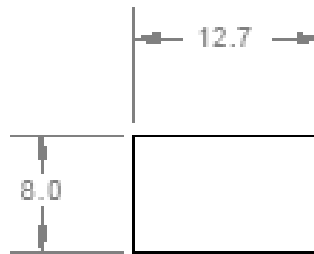
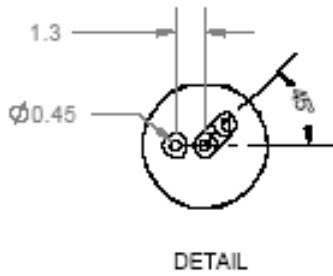
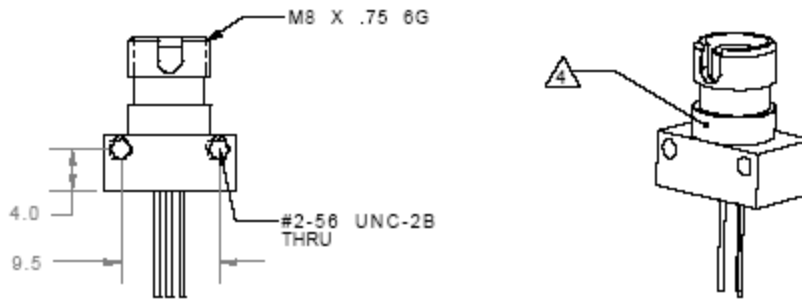
Pinout



Pigtailed				Receptacle			
P DXXKAAAFCCB-O-V-M				PDXXKAAACCCF-O-V			

Device Type XX	Device Code K	Active Area AAA	Fiber Size F (µm)	Connector CC Pigtail Only	Receptacle CCC	Bracket B Pigtail Only	Orienta- tion O	Pigtail Length M
IN=InGaAs PIN	D	055=55microns	1=9/125/900	FC=FC/PC	FC1=Panel Mount	A=None	M	10=10m
					FC2=Board Mount	B=102-10112 Panel	03=3m	
					SC1= Panel Mount	C=102-10181 BdMt	01=1m	
					SC2= Panel or Board Mount	D=102-10198 BdMt	.5=0.5m	
						W=Bracket Shipped Separately X=Customer Supplied	.1=0.1m	

FC Board Mount Receptacle



**PDIND055FC21-M-0 InGaAs Detectors for Fiber Optics
PDIND055SC21-M-0**

InGaAs Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Value	Unit
Reverse Current	I_R	2	mA
Reverse Voltage	V_R	20	V
Forward Current	I_F	5.0	mA
Operating Temperature	T_{OPR}	-40 to 85	°C
Storage Temperature	T_{STR}	-40 to 95	°C

