

## 1550nm Mini SM Pigtailed InGaAs PIN Photodiode

1550nm Mini SM Pigtailed InGaAs Photodiode is a semiconductor optoelectronic product designed for detecting light signal by transferring the light signal to electric signal, SM Pigtailed InGaAs Photodiode is built with InGaAs chip material and terminated with SM pigtail to detect the light with high responsibility and low dark current, it's widely used in fiber optic sensor and optic electric communication field, the pigtailed fiber can be customized upon request.

### Application:

Fiber Communication  
Fiber Optic Sensor  
Computed Tomography  
Testing System

### Features:

High Response  
Low Dark Current  
Low Capacitance  
High Reliability



### Absolute Maximum Ratings:

Parameter	Symbol	Value	Unit
Reverse Voltage	Vr	12	V
Forward Current	If	10	mA
Operating Temperature	T	-40~+85	°C
Storage Temperature	T	-40~+85	°C
Solder Temperature	T	260	°C
Lead Solder Time		10	S

Notice: Above specifications should not be exceeded, or the Photodiode will be seriously damaged.

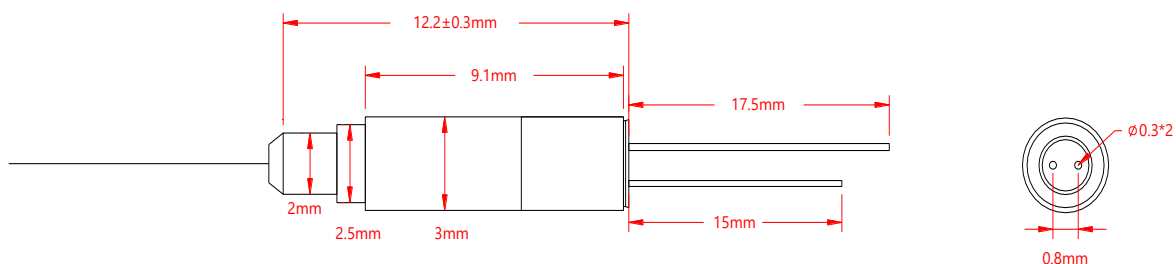
### Optical and Electrical Specification:

Parameter	Symbol	Min.	Tpy.	Max.	Unit	Condition
Wavelength Range	$\lambda$	1100	1550	1650	nm	
Saturated Optical Power	P			10	mW	Vr=5V
Dark Current	Id		0.03	0.16	nA	Vr=5V
Responsivity	$\lambda=1310\text{nm}$	0.80	0.85		A/W	
	$\lambda=1550\text{nm}$	0.85	0.90		A/W	
Operating Voltage	Vr		5		V	
Breakdown Reverse voltage	Vb			15	V	Ir=10uA
Frequency Bandwidth	Bw		2		GHz	
Junction capacitance	Cj		0.65	0.80	Pf	Vr=5V
Return Loss	RL	45	50		dB	
Fiber Type	SM Fiber					

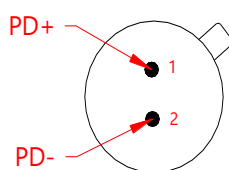
Notice: Above specifications are tested in room temperature at 25°C.

Specifications may change without notice.

**Drawing:**



**Pin Information:**



**Ordering Information (Part Number):**

**SMNIPD-WWWW-BB-J-LL-CC**

WWW	BB	J	LL	CC
Response Wavelength	Bandwidth	Fiber Jacket	Fiber Length	Connector
1310 - 1310nm 1550 - 1550nm SSSS - Specify	02 - 2GHz	B - 250um Bare Fiber L - 900um Loose Tube	05 - 0.5m 10 - 1.0m 15 - 1.5m 20 - 2.0m SS - Specify	NE - None FA - FC/APC FU - FC/UPC LA - LC/APC LU - LC/UPC SA - SC/APC SU - SC/UPC ST - ST/UPC

**Notification:**

1. The Semiconductor Optoelectronic products are particularly sensitive of ESD (electro-static discharge), it's recommended to use grounded anti-static wrist straps and grounded anti-static mats before handling the products.
2. Always take anti-static measures to storage the products when not in use.

