

800-2100nm SM Pigtailed InGaAs Photodiode

800-2100nm 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	V _r	3	V
Forward Current	I _f	5	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:

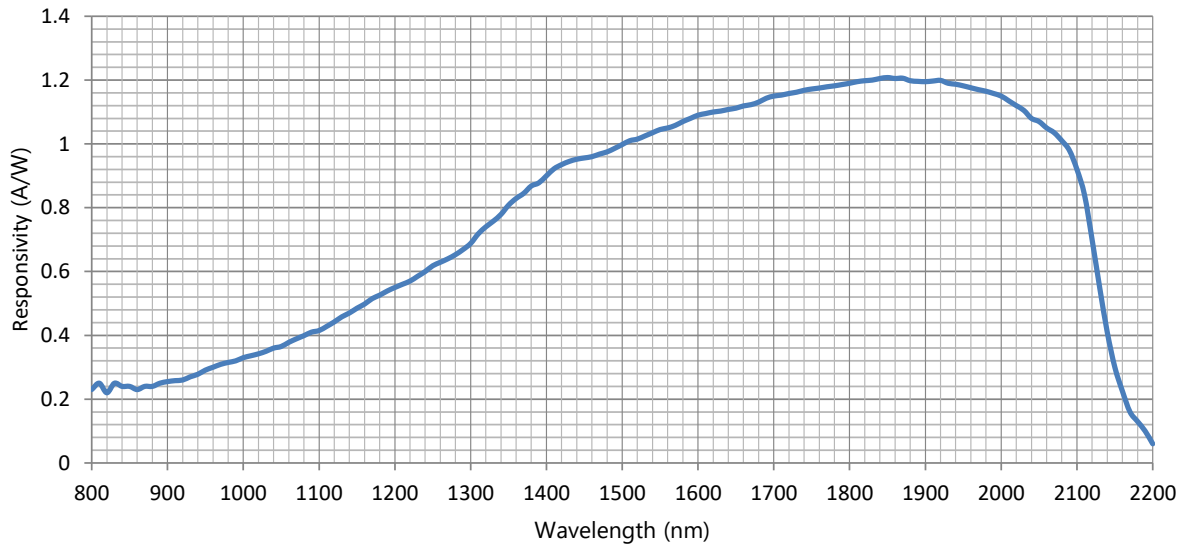
Parameter	Symbol	Min.	Tpy.	Max.	Unit	Condition
Wavelength Range	λ	800		2100	nm	
Saturated Optical Power	P		4		mW	V _r =2V
Dark Current	I _d		2		nA	V _r =0V
			20		nA	V _r =2V
Responsivity	R	λ=850nm	0.23		A/W	V _r =0V
		λ=1310nm	0.70		A/W	
		λ=1550nm	1.05		A/W	
		λ=1950nm	1.18		A/W	
		λ=2100nm	0.90		A/W	
Operating Voltage	V _r	0		2	V	
Breakdown Reverse voltage	V _b	6			V	I _r =10uA
Junction capacitance @1MHz	C _j		90		Pf	V _r =0V
			18		Pf	V _r =2V
Active Diameter	A _d		0.3		mm	
Response Time (Raise/Fall)	T _r /T _f		3		ns	
Shunt Impedance			5		MΩ	V _r =10mV
Return Loss	RL	45	50		dB	
Fiber Type		SM Fiber				

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

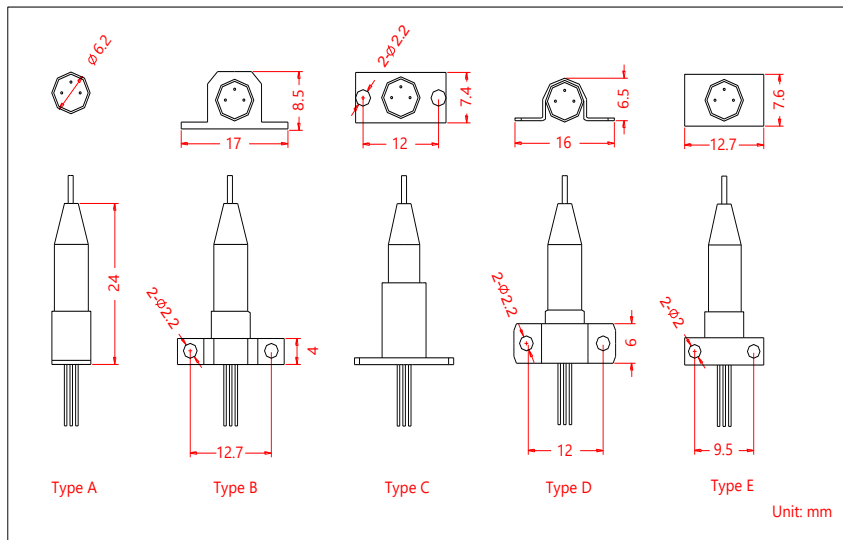
Specifications may change without notice.

Wavelength VS Responsivity Curve:

Responsivity VS Wavelength



Drawing:



Pin Information:

	Type A		Type B		Type B	
	Pin 1	PD +	Pin 1	PD +	Pin 1	PD +
	Pin 2	PD -	Pin 2	PD -	Pin 2	Case
	Pin 3	Case	Pin 3	Case	Pin 3	PD -

Ordering Information (Part Number):

SMIPD- WWW - AAA - S - P - J - LL - CC						
WWW	AAA	S	P	J	LL	CC
Test Wavelength	Active Diameter	Saddle Type	Pin Assingment	Fiber Jacket	Fiber Length	Connector
1950 - 1950nm SSSS - Specify	Z30 - Φ 0.3mm SS - Specify	A - Type A B - Type B C - Type C D - Type D E - Type E	A - Type A B - Type B C - Type C	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 particulary 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.

