

800-1700nm SM Pigtailed Fast InGaAs Photodiode 6GHz

800-1700nm SM Pigtailed Fast 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 communication field, the pigtailed fiber can be customized as per 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	20	V
Forward Current	If	3	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.

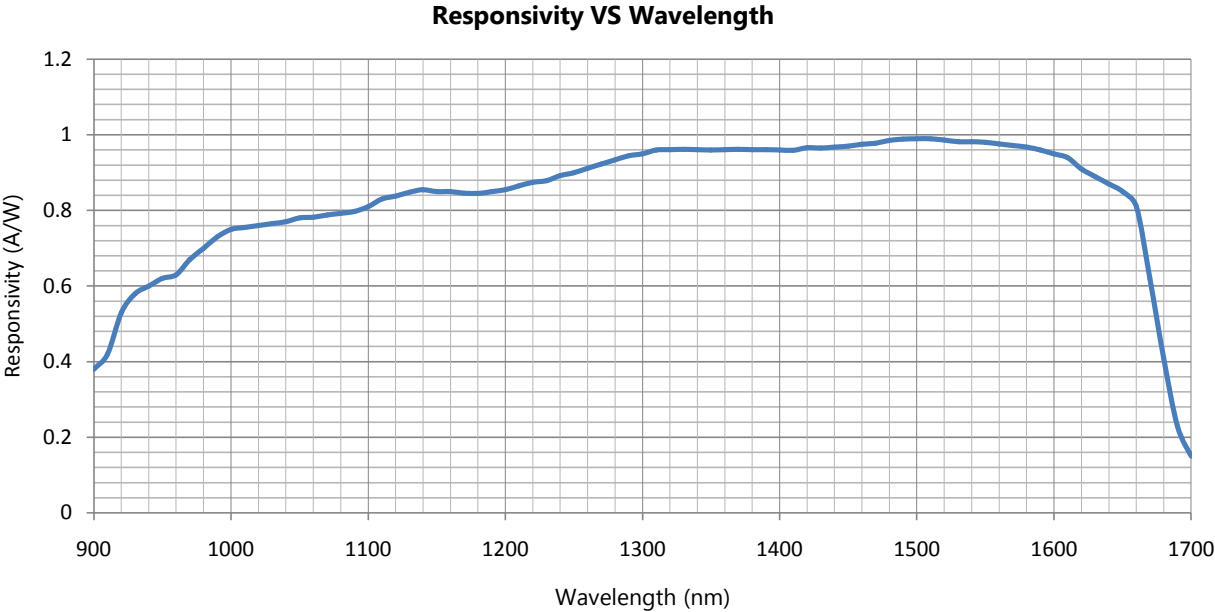
Optical and Electrical Specification:

Parameter	Symbol	Min.	Tpy.	Max.	Unit	Condition
Wavelength Range	λ	800		1700	nm	
Saturated Optical Power	P		3		mW	Vr=5V
Dark Current	Id		0.15		pA	Vr=0V
			20		pA	Vr=5V
Responsivity	$\lambda=1310\text{nm}$	R	0.88		A/W	Vr=0V
	$\lambda=1550\text{nm}$		0.86		A/W	
Operating Voltage	Vr	0		10	V	
Breakdown Reverse voltage	Vb			40	V	Ir=10uA
Frequency Bandwidth	Bw		6		GHz	
Junction capacitance	Cj		100		Pf	Vr=0V
			0.4		Pf	Vr=5V
Active Diameter	Ad		40		um	
Response Time (Raise/Fall)	Tr/Tf		60		ps	
Return Loss	RL	45	50		dB	
Fiber Type	SM Fiber					

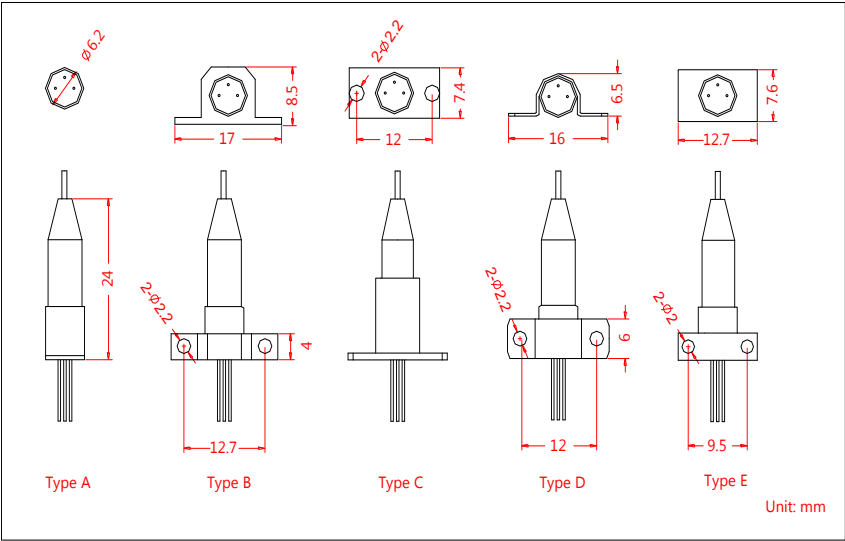
Notice: Above specifications are tested in room temperature at 25°C.

Specifications may change without notice.

Wavelength VS Responsivity Curve:



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):

SMFIPD-<i>WWW</i>-<i>AAA</i>-<i>S</i>-<i>P</i>-<i>J</i>-<i>LL</i>-<i>CC</i>						
WWW	AAA	S	P	J	LL	CC
Test Wavelength	Active Diameter	Saddle Type	Pin Assingment	Fiber Jacket	Fiber Length	Connector
1310 - 1310nm	ZZ4 - Φ 0.04mm	A - Type A	A - Type A	B - 250um Bare Fiber	05 - 0.5m	NE - None
1550 - 1550nm	SS - Specify	B - Type B	B - Type B	L - 900um Loose Tube	10 - 1.0m	FA - FC/APC
SSSS - Specify		C - Type C	C - Type C		15 - 1.5m	FU - FC/UPC
		D - Type D			20 - 2.0m	LA - LC/APC
		E - Type E			SS - Specify	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.

