



InGaAs/InP PIN Photodiode Modules Pigtailed for Analog Application

Model No. R13A-XYZ-M

Read Model No.	R13A-XYZ-M
R13A = Receiver	Analog InGaAs/InP PIN photodiode
X = Package	Pigtail (X=P)
Y = Connector	None (Y=NO); FC-APC (Y=FA); SC-APC (Y=CA); ST-APC (Y=TA)
Z = Fiber	9/125 μm SM fiber (Z=1)
M = Mount	No flange (M=0); Standard flange (M=1)

Features

- Plane structure InGaAs photodetector with high linearity
- Low capacitance
- Low return loss
- Low dark current
- High responsivity

Applications

- LANS
- FDDI
- SONET OC-3/OC-12/OC-24
- SDH STM-1/STM-4
- Gigabit Ethernet
- Power Meter

Packaging

- SM fiber pigtailed with optional FC, ST, SC/APC connectors

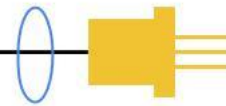


Specifications

Absolute Maximum Ratings				
Parameters	Symbol	Min.	Max.	Unit
Operating Temperature Range	T_{op}	-40	85	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40	85	$^{\circ}\text{C}$
Input Power Saturation	P_{IN}		1	mW
Reverse Voltage	V_R		25	V
Forward Current	I_F		10	mA
Power Dissipation	P_{DISS}		<100	mW

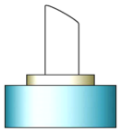
Electro-Optical Characteristics (CW @ $T_C = 25^{\circ}\text{C}$ unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Fiber Length		1.0	1.05	1.1	m	
Optical Wavelength Range	λ	1100	-	1620	nm	
Responsivity	R	-	≥ 0.8	-	mA/mW	$\lambda=1310\text{nm}$
Frequency Response	F_r	-	± 2	-	dB	
Second-Order Intermodulation	IMD2		-70		dBc	
Third-Order Intermodulation	IMD3		-80		dBc	
Back Reflection	RL	-	-50	-40	dB	
Dark Current	I_D	-	0.1	1	nA	
Capacitance	C	-	0.9	1	pF	
Bandwidth	BW	-	3.0	-	GHz	

Note: 1310nm two tone test, OMI=40% and total received power is 0dBm. The distortion measured at 54MHz, 446.5MHz, 548.5MHz, 746.5MHz and 854.5MHz.



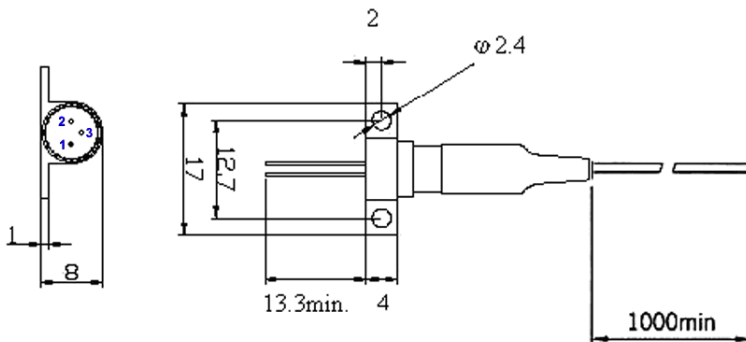
For Pigtail – Optics Fiber Connector Type

APC

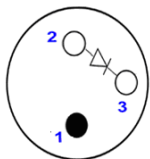


Type	Ferrule Diameter	Single mode APC	Type	Ferrule Diameter	Single mode APC
FC	2.5mm		ST	2.5mm	
SC	2.5mm		LC	1.25mm	

Outline Dimensions (unit: mm)



Pin Configuration



- 1. Case
- 2. PD Anode
- 3. PD Cathode

Note: Specifications are subject to change without notice.