

1.25Gbps Connectorized InGaAs/InP PIN Photodiode Modules

Model No. R13-XYZ-M

Read Model No.	R13-XYZ-M
R13 = Receiver	InGaAs/InP PIN photodiode
X = Package	Receptacle (X=R); Pigtail (X=P)
Y = Connector	None (Y=NO); FC-PC (Y=FC); SC-PC (Y=SC); ST-PC (Y=ST); FC-APC (Y=FA); SC-APC (Y=CA); ST-APC (Y=TA)
Z = Fiber	9/125 mm SM fiber (Z=1), 50/125 mm MM fiber (Z=2), 62.5/125 mm MM fiber (Z=3)
M = Mount	Receptacle (M=1); PigtailL: No flange (M=0), Horizontal mount (M=1)

Features

- Plane structure InGaAs PD with high linearity
- High speed
- High Responsivity at 1310nm and 1550nm
- Low dark current
- Low capacitance
- Low return loss
- Packaged in connector Pigtail or Receptacle

Packaging

- FC/ST/SC receptacle package
- SM/MM fiber pigtailed with optional FC/ST/SC connector

Applications

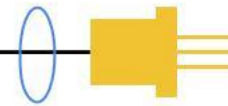
- SONET OC3, OC-12 / SDH STM-1, STM-4
- LAN

Specifications

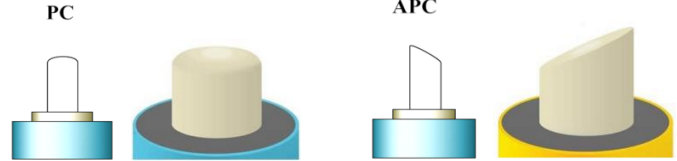
Absolute Maximum Ratings			
Parameters	Symbol	Min.	Unit
Storage Temperature	Tstg	-40 to +85	°C
Operating Case Temperature	Top	-40 to +85	°C
Peak Optical Power	Po	3	mW
PD Reverse Voltage	V _{RD}	20	V
PD Forward Current	I _{FD}	10	mA
Soldering Temperature	Stemp	260	°C
Soldering Time	Stime	10	sec













Electro-Optical Characteristics (CW @ T _c = 25°C unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Optical Wavelength Range	λ	1100	-	1630	nm	
Bandwidth	BW	-	1.5	-	GHz	V _R =5V
Responsivity	R	0.7	0.85	-	A/W	λ=1310nm, V _R =5V, P _{in} = 100uW
		0.8	0.9	-		
Dark current	I _d	—	0.2	2.0	nA	V _R =5V
Capacitance	C	—	—	0.5	pF	V _R =5V
Rise/Fall Time	T _r /T _f	—	—	300	ps	V _R =5V, 20%~80%

Fiber Pigtail Specifications						
Parameters	Symbol	Min.	Typ.	Max.	Unit	
Fiber type	Single Mode Fiber (Flame Retardant Hytrel Coating)					
Cladding diameter	D _{cl}	122	125	128	um	
Mode field diameter	D _{mf}	-	10	-	um	
Coating diameter	D _{bc}	-	0.9	1	mm	
Pigtail length	L	0.9	1.0	1.1	m	
Bending radius	R _b	30	-	-	mm	
Connector	TBD					

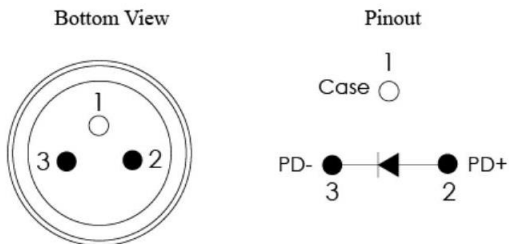


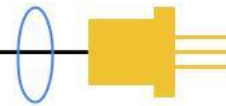
For Pigtail – Optics Fiber Connector Type



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

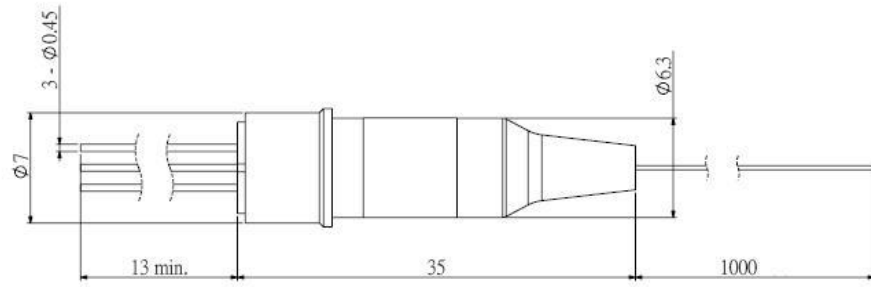
Pin Configuration



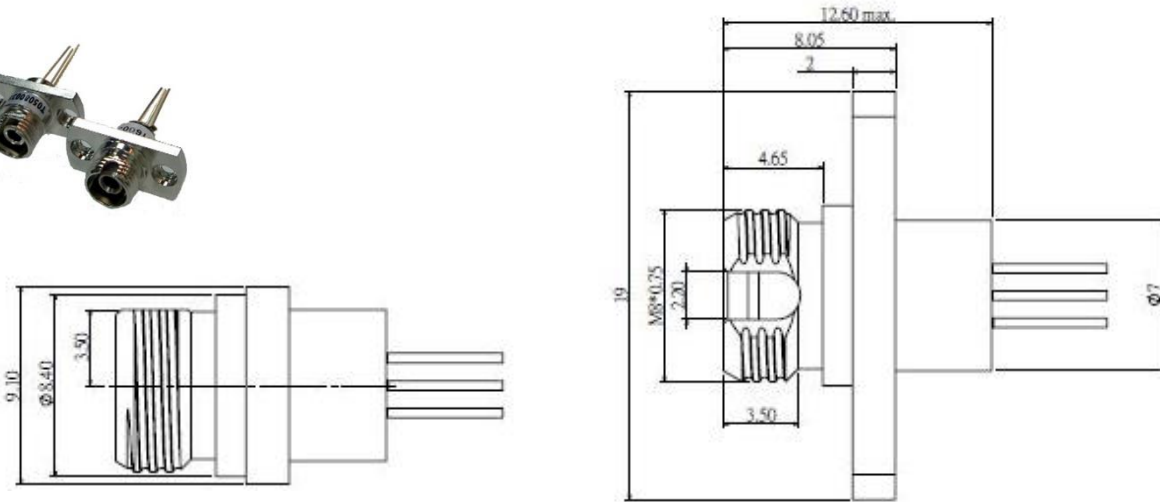


Outline Dimensions (unit: mm)

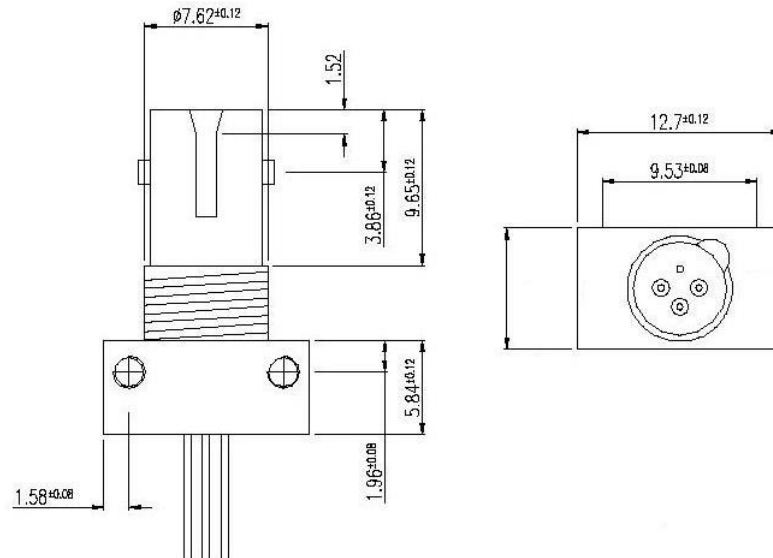
Pigtail



FC Receptacle



ST Receptacle



Note: Specifications are subject to change without notice.