



R13-PYZ-M

1.25Gbps Pigtailed InGaAs/InP PIN Photodiode Receivers

Description

The Lasermate R13-PYZ-M is a 1100-1630nm wavelength range, fiber-coupled InGaAs PIN photodiode receiver module. The InGaAs/InP photodiode optical module is fiber pigtailed with fiber end either open or equipped with FC/ST/SC optical connector. The detector module is capable of reaching up to 1.25Gbps data rate operation.



Features

- Plane structure InGaAs PD with high linearity
- High speed
- High Responsivity at 1310nm and 1550nm
- Low dark current
- Low capacitance
- Low return loss

Packaging

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

Applications

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

Ordering Information

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



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	0.8	0.9	-	A/W	λ=1310nm, V _R =5V, P _{in} = 100uW
Dark current	I _d	—	0.2	2.0	nA	V _R =5V
Capacitance	C	—	—	0.5	pF	V _R =5V
Rise/Fall Time	τ _r /τ _f	—	—	300	ps	V _R =5V, 20%~80%

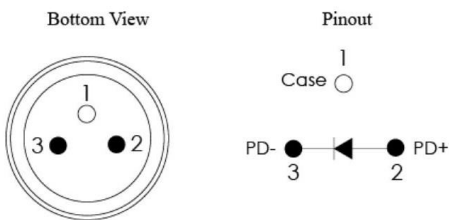
Fiber Pigtail Specifications					
Parameters	Symbol	Min.	Typ.	Max.	Unit
Fiber type	Single Mode Fiber (Flame Retardant Hytrel Coating)				
Cladding diameter	Dcl	122	125	128	um
Mode field diameter	Dmf	-	10	-	um
Coating diameter	Dbc	-	0.9	1	mm
Pigtail length	L	0.9	1.0	1.1	m
Bending radius	Rb	30	-	-	mm
Connector	TBD				

Optics Fiber Connector Types

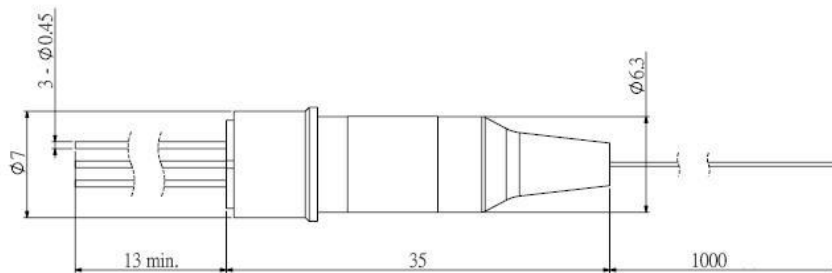


Type	Ferrule Diameter	Multi mode PC	Single mode PC	Single mode APC
FC	2.5mm			
SC	2.5mm			
ST	2.5mm			
LC	1.25mm			

Pin Configuration



Outline Dimensions (unit: mm)



Note: Specifications are subject to change without notice.