

## GPDR-2020xxx

Long Wavelength PIN Photodiode Module (Receptacle Module)



### Features

- ◆ Low Return Loss
- ◆ Low Dark Current
- ◆ Quick Pulse Response
- ◆ Suitable for CATV Application
- ◆ High Responsibility and High Linearity
- ◆ High Reliability and Long Operation Life
- ◆ RoHS Compliant Products Available

### Applications

- ◆ Optical Receiver
- ◆ Test Equipments

### Ordering Information (Standard version <sup>\*Note1</sup>)

Part No.	Wavelength (nm)	Active diameter (um)	Bandwidth (GHz)	Package	Pin Type
GPDR-2020DMH	1100~1650	75	2	D	M
GPDR-2020BMR	1100~1650	75	2	B	M
GPDR-2020DSX	1100~1650	75	2	D	S
GPDR-2020AMD	1100~1650	75	2	A	M
GPDR-2020EMR	1100~1650	75	2	E	M

\*Note1: For more ordering information, please refer the nomenclature and contact EOPTOLINK sales.

## Absolute maximum ratings

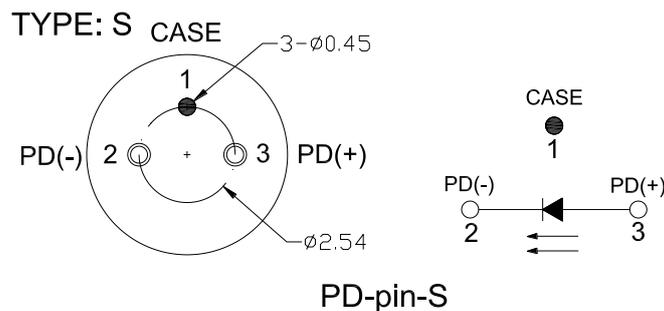
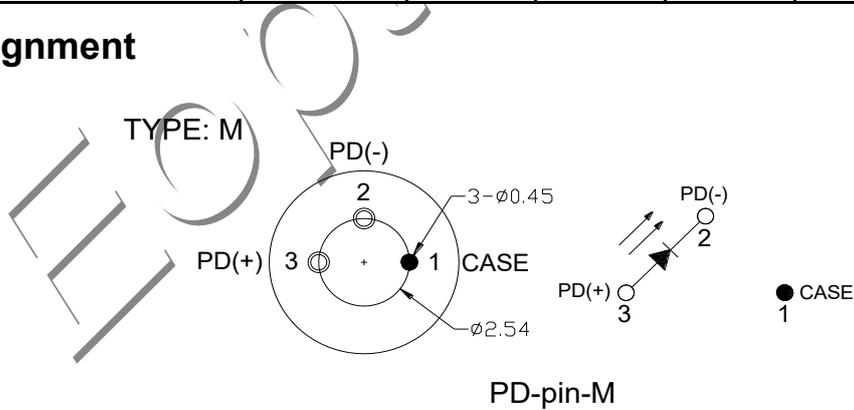
Parameter	Symbol	Min	Max	Unit
Storage Temperature	T <sub>ST</sub>	-40	100	°C
Operating Temperature	T <sub>OP</sub>	-40	85	°C
Reverse Voltage	VR	-	20	V
Saturation Input Power	P <sub>IN</sub>	-	10	dBm
Soldering Temperature / Time	Ts/t	-	260/10	°C/S

## Electrical and optical characteristics

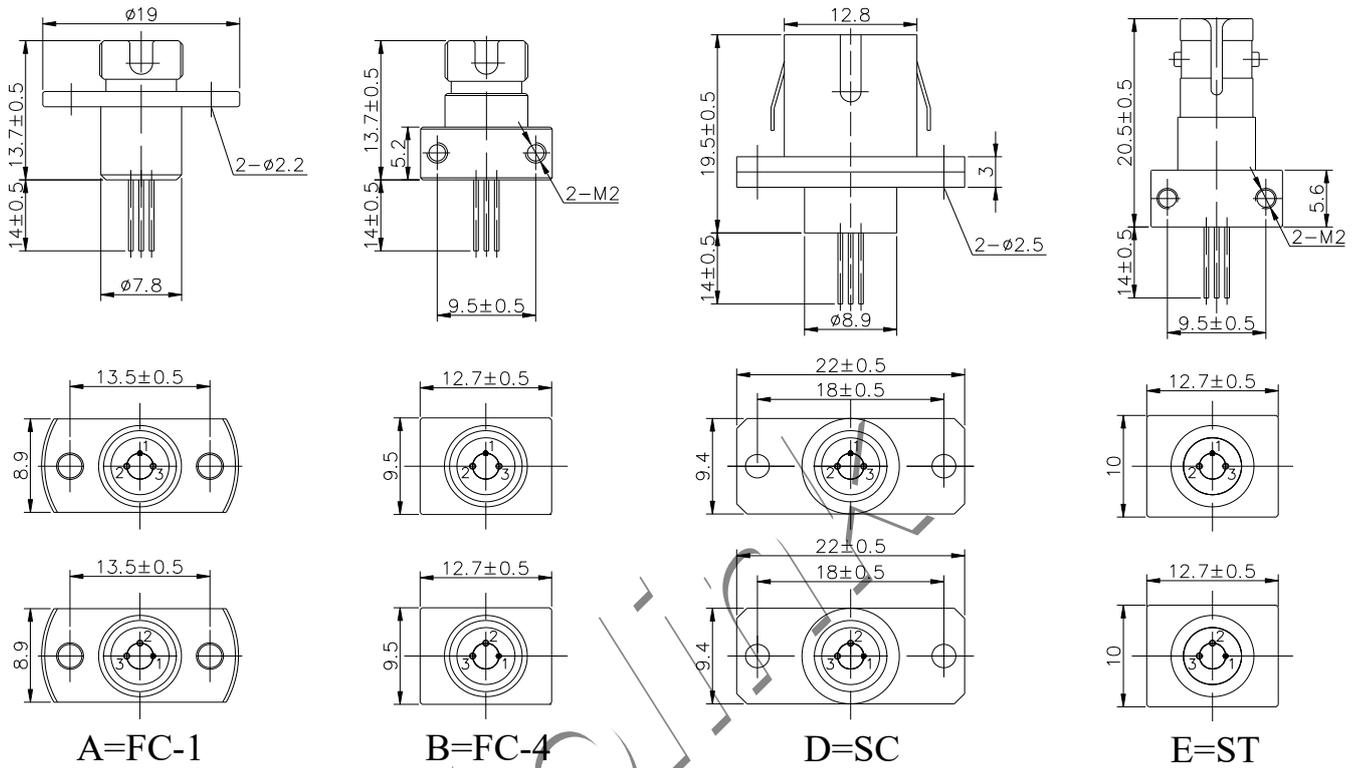
(V<sub>r</sub>=5V, SMF (9.5/125μm), T<sub>c</sub>=+25°C, unless otherwise noted.)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Detection Wavelength Range	λ	1100	-	1650	nm	
Active Diameter	DA	-	75	-	μm	
Responsivity	R	0.80	0.85	-	A/W	V <sub>r</sub> =-5V@1310nm
		0.85	0.90	-	A/W	V <sub>r</sub> =-5V@1550nm
Return Loss	RL	-	-	-40	dB	
Dark Current	I <sub>d</sub>	-	0.1	1	nA	V <sub>r</sub> =5V
Capacitance	C <sub>p</sub>	-	0.6	1	pF	V <sub>r</sub> =5V
Bandwidth	BW	2	-	-	GHz	V <sub>r</sub> =5V

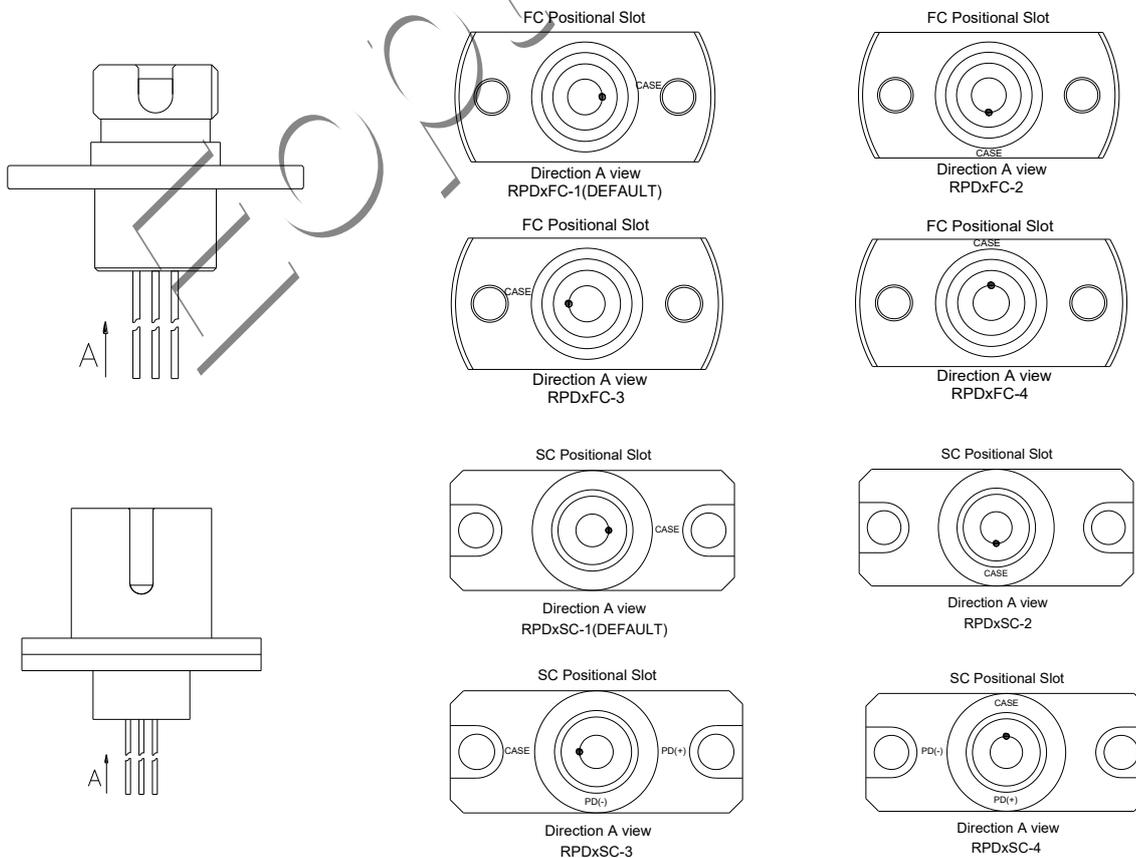
## Pin Assignment

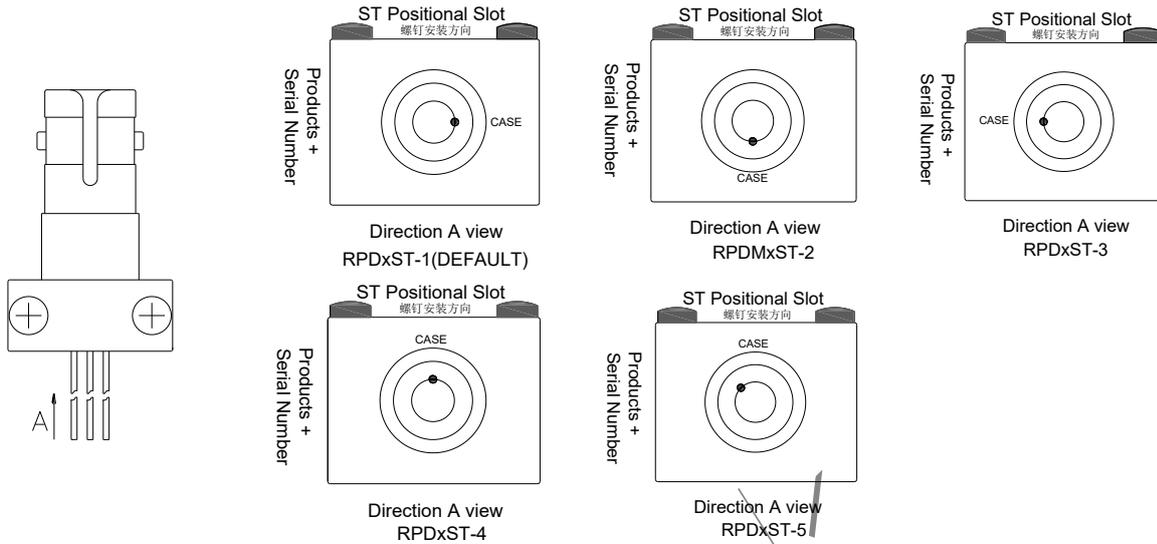


## Receptacle Package series

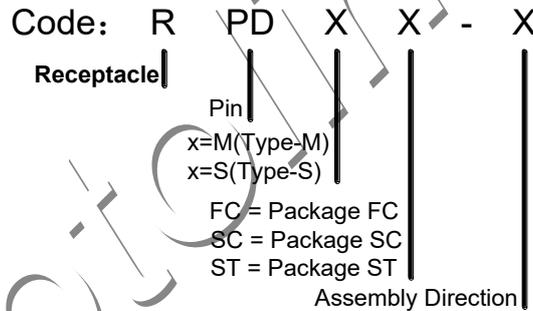


## The direction of fix card



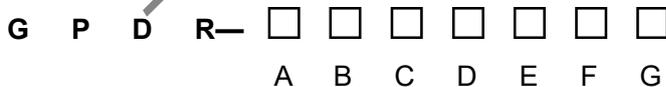


## Nomenclature of assembly direction <sup>\*Note2</sup>



\*Note2: Please Specify the assembly direction code based on the Pin assignment.  
For example:PPDMFC-1、RPDSSC-4、RPDMST-5.

## Ordering Information



<b>A</b>	<b>Wavelength</b>	20=1100~1650nm			
<b>B</b>	<b>Explore area</b>	2=75μm			
<b>C</b>	<b>RF Bandwidth</b>	0≤2GHz			
<b>D</b>	<b>Package series<sup>*Note3</sup></b>	A=FC-1	B=FC-4	D=SC	E=ST
<b>E</b>	<b>Pin Type</b>	M=PD-pin-M		S=PD-pin-S	
<b>F</b>	<b>TO Type</b>	x=A~Z(No choice)			
<b>G</b>	<b>Fiber diameter</b>	Blank=SM		M=MM	

\*Note3 \*Please refer the receptacle package series illustration.

## Precaution

- 1) The modules should be handled in the same manner as ordinary semiconductor devices to prevent the electro-static damages. For safe keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.
- 2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.
- 3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed. Or contact Eoptolink Technology Inc., Ltd. listed at the end of the documentation to get the latest documentation.

## Revision History

Version	Initiated	Reviewed	Approved	Revision History	Release Date
Vb-1	Yinchun.Zhao	Kelly.Cao		Released.	2008-6-10
Vb-2	Zhao	Kelly.Cao		Add polishing option.	2008-9-16
Vb-3	Jack.Jiang	Yinchun, Zhao		Add the length of the PIN	2011-8-5
Vb-4	Jack.Jiang	Kelly.Cao Yinchun.Zhao		Add the tolerance of length for screw hole to hole	2011-12-14
Vb-5	Jack.Jiang	Yinchun.Zhao		Add the distance of hole to hole for "D=SC"	2011-12-27
Vb-6	Jack.Jiang	Yinchun.Zhao		Changed the "Return Loss"	2012-9-5
Vb-7	Jack.Jiang	Yinchun.Zhao		Deleted the forward current	2013-5-29
Vb-8	George.Zhong hanks.du	Kelly.cao Zore.Zhao		Update pictures and Contact:	2016-12-30
Vb-9	Yinchun.Zhao	James	Vincent	1、 Update the The direction of fix card 2、 Update T-pins to S-pins	2023-8-28

## Notice:

Eoptolink reserves the right to make changes or discontinue any product or service identified in this publication, without notice, in order to improve design and/or performance. Applications that are described herein for any of the products are for illustrative purposes only. Eoptolink makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

## Contact:

Add: No.127 West Wulian Street, Shuangliu District, Chengdu, 610213, P.R. CHINA

Tel: (+86) 028-67087999

Fax: (+86) 028-67087979

E-mail:sales@eoptolink.com

<http://www.eoptolink.com>