GPDP-20XXXXXX

Long Wavelength PIN PD with Pigtail for Wide Frequency-range Application

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

Generall

GPDP-20XXXXXX Series are InGaAs/InP PIN photodiode modules designed for fiber optic communication systems. These modules are with pigtail, and have high responsibility, high speed and low dark current. A photodiode is mounted into a low capacitance coaxial package integrated with a single mode fiber pigtail.

Ordering Information (Standard version*Note1)

Part No.	Wavelength (nm)	Explore Area (um)	Bandwidth (GHz)	Package	Pin Type
GPDP-2020AFAMD	1310～1550	75	2	A	M
GPDP-2022BFAMG	1310～1550	75	3.2	B	M
GPDP-2022CSATG	1310～1550	753	3.2	C	T
GPDP-2020DSATL	1310～1550	75	2	D	T
GPDP-2020EFAML	1310～1550	75	2	E	M

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

Absolute maximum ratings

Parameter	Symbol	Min	Max	Unit
Storage Temperature	T_{ST}	-40	100	℃
Operating Temperature	T_{OP}	-40	85	℃
Reverse Voltage	VR	–	20	V
Forward Current	I_{FD}	–	10	mA
Saturation Input Power	P_{IN}	–	10	dBm
Soldering Temperature / Time	Ts/t	–	260/10	℃/S

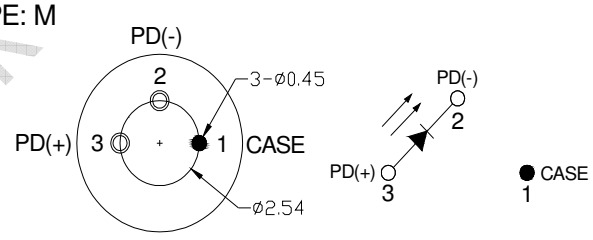
Electrical and optical characteristics

(Vr=5V, Tc=+25℃, unless otherwise noted.)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Detection Wavelength Range	λ	-	1100	–	1610	nm
Active Diameter	DA	-	50	75	–	μm
Responsibility	R	VR=-5V@1310nm	0.80	0.85	-	A/W
		VR=-5V@1550nm	0.85	0.90	-	A/W
Return Loss	RL	-	-	-55	-	dB
Dark Current	Id	VR = 5V	-	0.1	1	nA
Capacitance	Cp	VR = 5V	-	0.6	0.7	pF
Bandwidth	BW	VR=5V	-	-	3.2	GHz

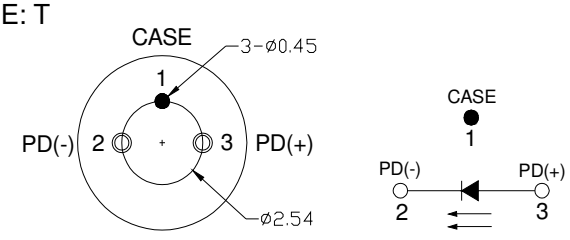
Pin Assignment

TYPE: M



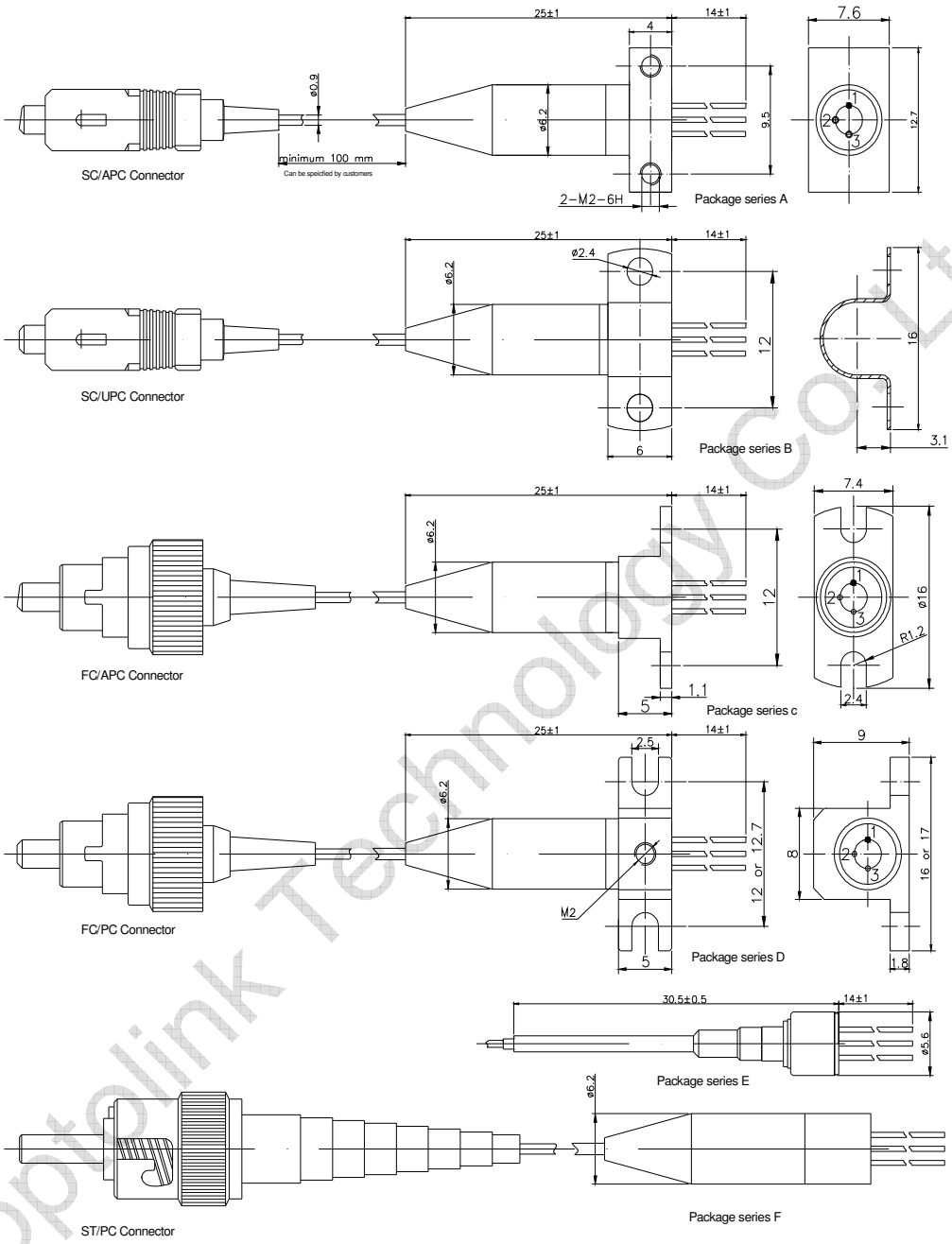
PD-pin-M

TYPE: T



PD-pin-T

Pigtail Package dimension*Note2、3、4



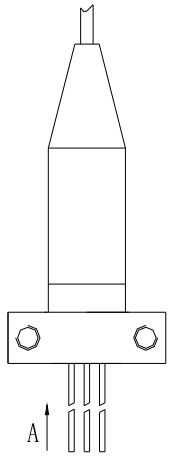
*Note2: PIN direction and laser mark can be customized. Pigtail is standard SM fiber; the length also can be customized.

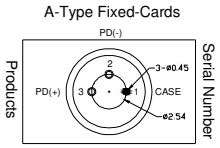
*Note3: For the package series D, the clamping rings dimensions (A) and drill size (B) are can be selected. The following types can be available. Please designate the detailed type while ordering the package series D.

	A(mm)	B(mm)
D	16	12
D-S	17	12.7

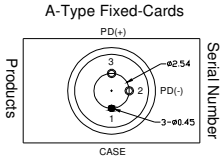
*Note4: For the package series B, the fix card is fixed by customer self. For the detailed information of fix card of A, C, D package series, please refers the following graphs.

The direction of fix card

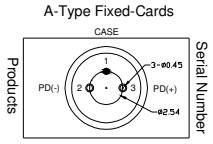




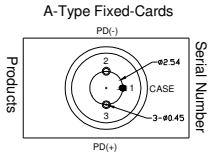
Direction A view
PPDMA-1(DEFAULT)



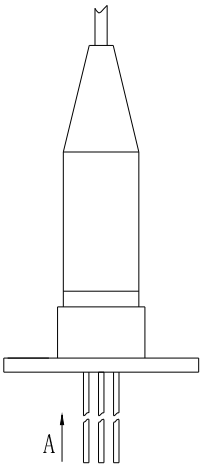
Direction A view
PPDMA-2

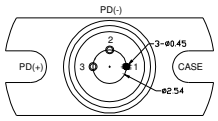


Direction A view
PPDTA-1(DEFAULT)

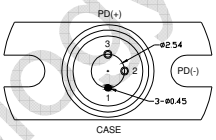


Direction A view
PPDTA-2

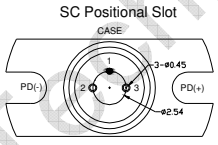




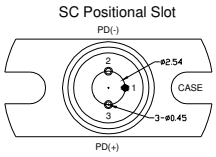
Direction A view
PPDMC-1(DEFAULT)



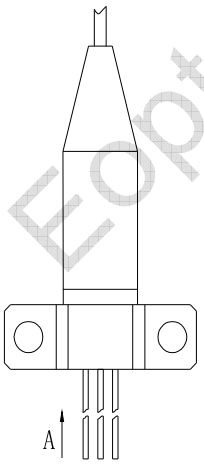
Direction A view
PPDMC-2

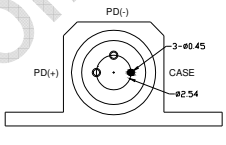


Direction A view
PPDTC-1(DEFAULT)

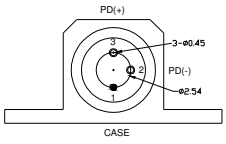


Direction A view
PPDTC-2

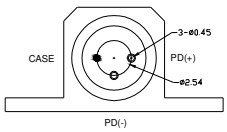




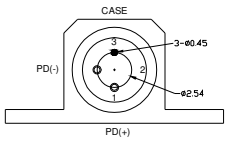
Direction A view
PPDMD-1(DEFAULT)



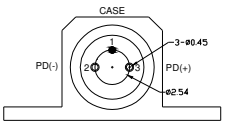
Direction A view
PPDMD-2



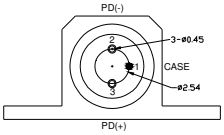
Direction A view
PPDMD-3



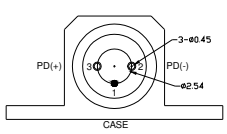
Direction A view
PPDMD-4



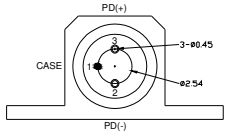
Direction A view
PPDTD-1(DEFAULT)



Direction A view
PPDTD-2



Direction A view
PPDTD-3



Direction A view
PPDTD-4

Nomenclature of assembly direction[*Note5]

Code: P PD X X - X

- P: Pigtail
- PD: Pin
- X: M=Type-M; T= Type-T
- X: A=A Type Fixed Cards; C=C Type Fixed Cards; D=D Type Fixed Cards
- X: Assembly Direction

*Note5: Please designate the code of assembly direction.

Ordering Information

G P D P— □ □ □ □ □ □ □ □ □ □

A B C D E F G H I J

A	**Wavelength**	20=1100～1610nm					
B	**Explore area**	1=50μm			2=75μm		
C	**Bandwidth**	0≤2GHz		1≤2.7GHz		2≤3.2GHz	
D	**Package series**	A	B	C	D	E	F
E	**Connector**	F=FC/PC		S=SC/PC		T=ST/PC	SA=SC/APC
		FA=FC/APC		L=LC/PC		Blank=None	
F	**Pin Type**	M=PD-pin-M			T=PD-pin-T		
G	**TO Type**	J		D		L	G
H	**Pass Band Wavelength**	Blank=1310/1550nm		3=1310nm		5=1550nm	
I	**Fiber Type**	Blank=SM			M=MM		
J	**Fiber diameter**	BLANK=0.9mm		1=0.25mm		2=2.0mm	3=3.0mm

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.

Obtaining Document

You can visit our website:

http://www.eoptolink.com

Or contact Eoptolink Technology Inc., Ltd. listed at the end of the documentation to get the latest documentation.

Revision History

Verision	Initiated	Reviewed	Approved	Release Date
Va-4	Zore.Zhao	Kelly.Cao		2009-12-22

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