

# GPDP-2020DSAKD

## Long Wavelength PIN PD with Pigtail for Long Wavelength Band 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

### General

GPDP-2020DSAKD 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<sup>\*Note1</sup>)

Part No.	Wavelength (nm)	Explore Area (um)	Bandwidth (GHz)	Connector
GPDP-2020DSAKD	1100~1650	75	2	SC/APC

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

### Absolute maximum ratings

Parameter	Symbol	Min	Max	Unit
Storage Temperature	T <sub>ST</sub>	-40	85	°C
Operating Temperature	T <sub>OP</sub>	-40	85	°C
Reverse Voltage	VR	-	30	V
Saturation Input Power	P <sub>IN</sub>	-	10	dBm
Soldering Temperature / Time	Ts/t	-	260/10	°C/s

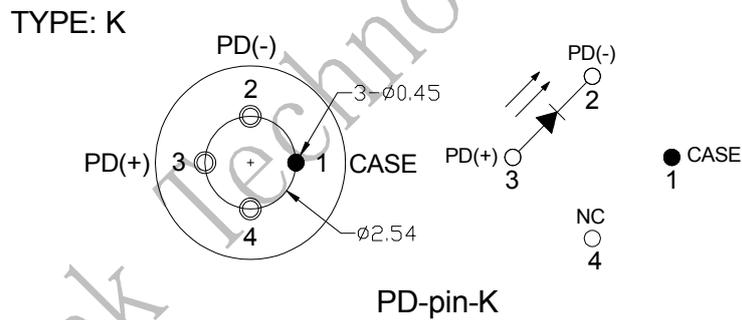
## Electrical and optical characteristics

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

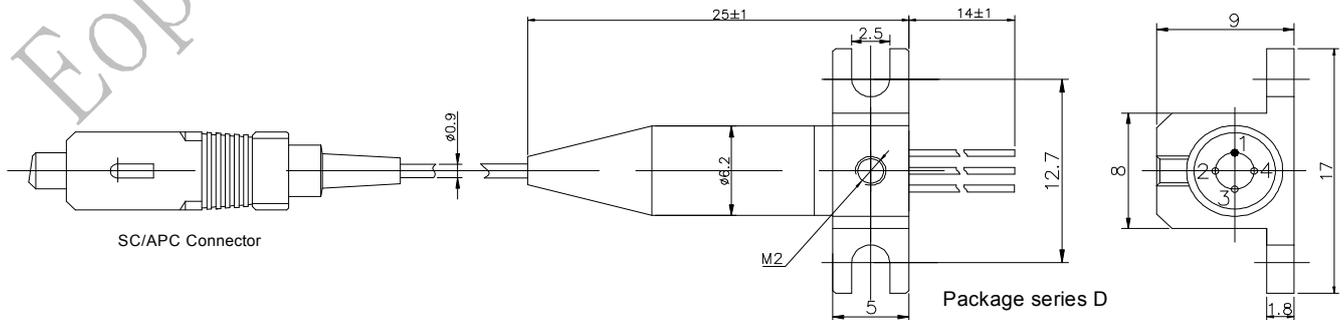
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Detection Wavelength Range	$\lambda$	-	1100	-	1650	nm
Active Diameter	DA	-	-	75	-	$\mu\text{m}$
Responsibility	R	VR=-5V@1310nm	0.80	0.85	-	A/W
		VR=-5V@1550nm	0.85	0.90	-	A/W
Return Loss	RL	-	-	-	-50	dB
Dark Current	Id	VR = 5V	-	0.15	1	nA
Capacitance	Cp	VR = 5V	-	0.6	0.7	pF
Bandwidth	BW	VR=5V	1.5	-	-	GHz
IMD2	CSO	$\lambda=1310\text{nm}$ <sup>Note2</sup>	-	75	70	dBc

\*Note2: Po=1mW, OMI=40%, IMD2 451.25MHz±373.25MHz.

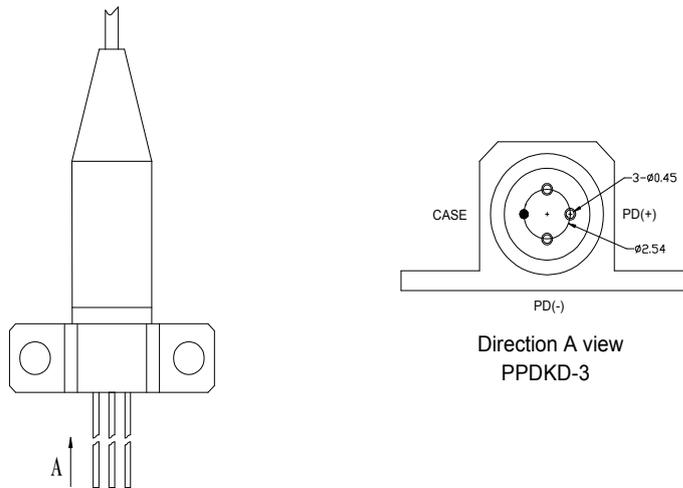
## Pin Assignment



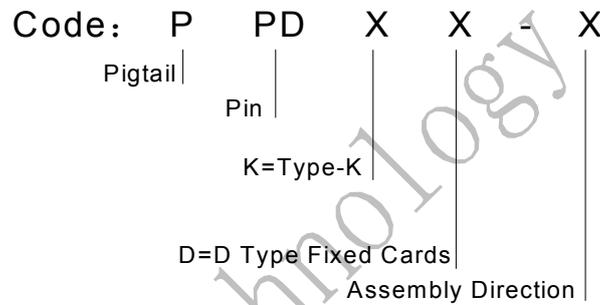
## Pigtail Package dimension



## The direction of fix card



## Nomenclature of assembly direction \*Note5



\*Note5: Please designate the code of assembly direction.

## Ordering Information



<b>A</b>	<b>Wavelength</b>	20=1100~1610nm			
<b>B</b>	<b>Explore area</b>	2=75μm			
<b>C</b>	<b>Bandwidth</b>	0≤2GHz			
<b>D</b>	<b>Package series</b>	D			
<b>E</b>	<b>Connector</b>	SA=SC/APC			
<b>F</b>	<b>Pin Type</b>	K=PD-pin-K			
<b>G</b>	<b>TO Type</b>	D			
<b>H</b>	<b>Pass Band Wavelength</b>	Blank=1310/1550nm	3=1310nm	5=1550nm	
<b>I</b>	<b>Fiber Type</b>	Blank=SM		M=MM	
<b>J</b>	<b>Fiber diameter</b>	BLANK=0.9mm	1=0.25mm	2=2.0mm	3=3.0mm
<b>K</b>	<b>Fibre length</b>	BLANK=100cm		XXX=000	

## 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	Revision History	Release Date
Vb-1	Yinchun, Zhao	Kelly.Cao		2010-6-11
Vb-2	Jack.Jiang	Yinchun, Zhao	Deleted the forward current	2013-6-8

## 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: Floor 5, Building 2, No. 21 Gaopeng Avenue, High-Tech District, CHENGDU, SICHUAN 610041 P.R.  
CHINA

Tel: (+86) 028-85122709 ext 816 & 809

Fax: (+86) 028-85121912

Postal: 610041

E-mail: sales@eoptolink.com

<http://www.eoptolink.com>

Eoptolink Technology Co., Ltd.