

Features

- Long work distance between PD can and fiber for integrating optical parts
- Low noise and high gain transimpedance amplifier built-in to meet OC-48
- 5 pin package available for an independent PD connection

Applications

- Bi-directional, triple-waves and CWDM optical communications
- Spectroscopy
- Wavelength selective sensors

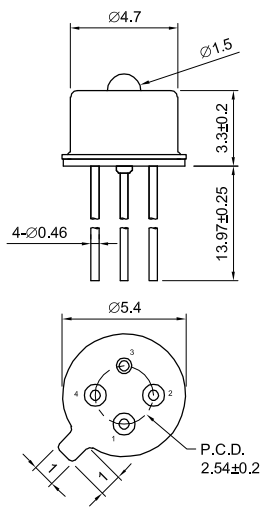
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Note
Supply voltage	V_{CC}	-0.5 to +6.0	V	
Operating temperature	T_{opr}	-40 to +85	°C	
Storage temperature	T_{stg}	-40 to +85	°C	

Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating voltage	V_{op}	3	-	5	V	
Supply current	I_{CC}	-	34	63	mA	
Bit rate	BR	-	2.5	-	Gbps	
Bandwidth @-3dB	BW	-	2.0	-	GHz	$R_L=50\Omega$, $P_i=-10dBm$, Small signal modulation
Optical sensitivity	P_{imin}	-	-22.5	-	dBm	Differential, BER=10 ⁻¹⁰
Output impedance	Z_O	48	50	52	Ω	Single ended
Differential output voltage	V_O	-	323	633	mVpp	$R_L>500\Omega$, Single ended
Noise equivalent power	NEP	-	-	916	nW _{RMS}	
Photo-electric conversion efficiency	η_{PE}	0.84	1.17	-	kV/W	$R_L>500\Omega$, Single ended

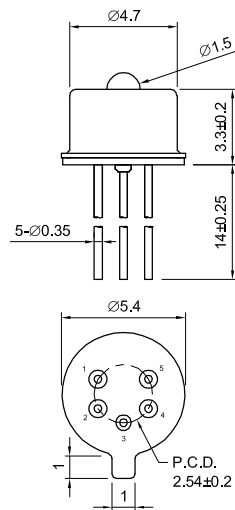
KPDX2GE-H32



Unit: mm

Pin	Function
1	V _{CC}
2	OUT
3	GND
4	OUTB

KPDX2GE-H33

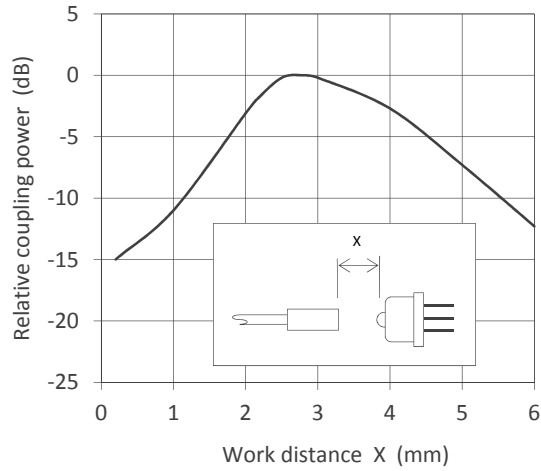


Unit: mm

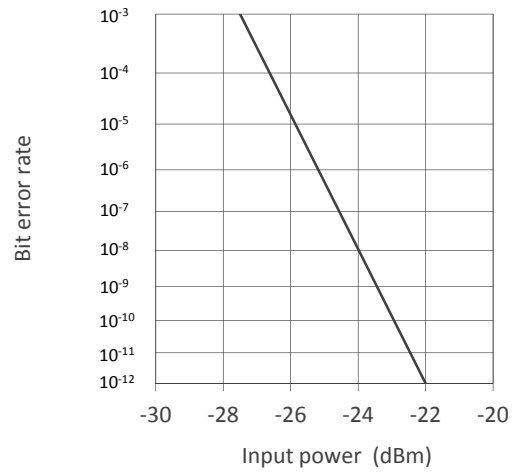
Pin	Function
1	V _{PD}
2	OUT
3	GND
4	OUTB
5	V _{CC}

* Pin assignment may differ in some models. Please refer to the latest information before use.

Collimated beam coupling



Bit Error Rate



- Specifications, characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (EU2002/95/EC).

Opto-technologies for the Future



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