

## InGaAs PD-TIA Receivers

### KPDX4G-T

#### Characteristics

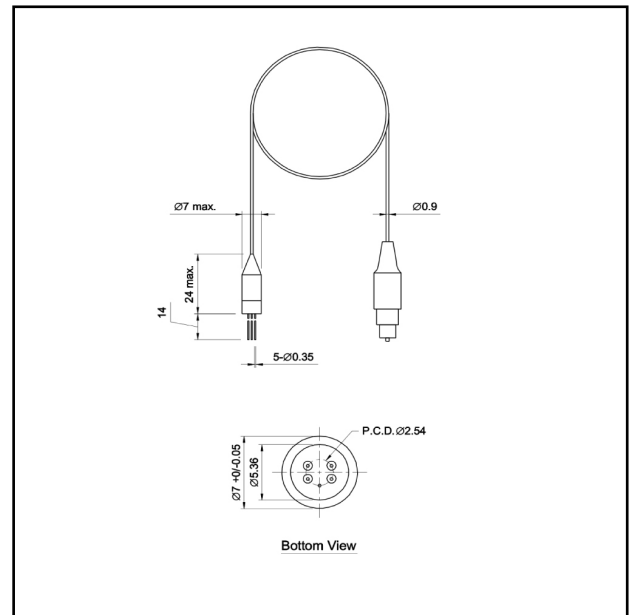
- Low noise and high speed transimpedance amplifier built-in to meet OC-96
- Low operating voltage 3.3V
- High reliability
- 5 pin package available for a PD current monitor

#### Applications

- Metro-access
- Optical Ethernet, Optical LAN
- 1x/2x/4x Fiber Channel receivers

#### Package

- PIGTAIL



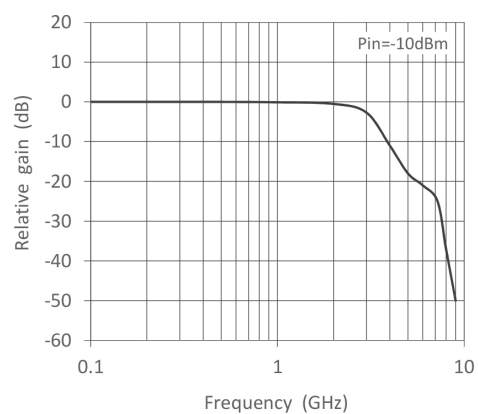
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Supply voltage	$V_{cc}$	-0.4 to 5.4	V	-
Maximum optical power input	$P_{imax}$	2.5	mW	-
Operating temperature	$T_{opr}$	-40 to +85		-
Storage temperature	$T_{stg}$	-40 to +85		-

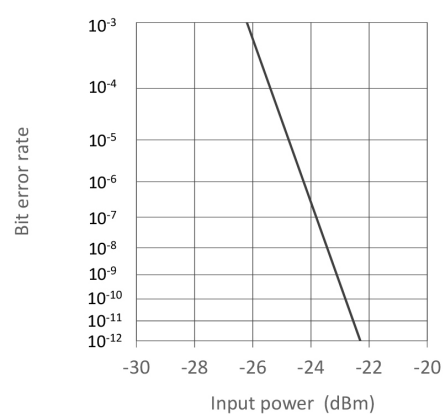
Electrical and Optical characteristics ( $T_a=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Sensitive wavelength		900	-	1700	nm	-
Operating voltage	$V_{op}$	3	3.3	3.6	V	-
Supply current	$I_{cc}$	-	24	-	mA	-
Bit rate	BR	-	4.25	4.25	-	-
Bandwidth @-3dB	BW	2.9	3.5	-	GHz	$R_L=50$ $P_i=-10\text{dBm}$ Small signal modulation
Optical sensitivity	$P_{min}$	-	-22	-	dBm	Single ended BER= $10^{-10}$
Output impedance	$Z_o$	-	50	-		single ended
Differential output voltage	$V_o$	85	130	190	mVpp	Single ended $R_L=50$
Photo-electric conversion efficiency	$PE$	-	3.3	-	kV/W	Single ended $R_L=50$

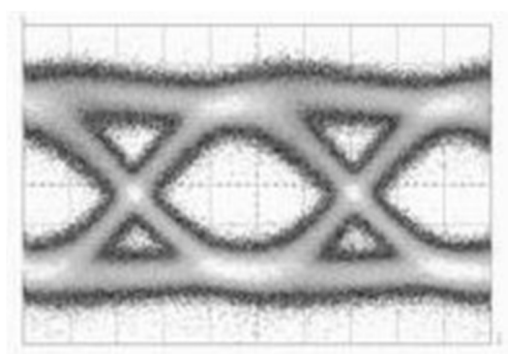
Frequency Response



Bit Error Rate



Eye Diagram



Hor. 50ps/div, Ver. 2.5mV/div, Pi=-20dBm

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