

## InGaAs PD-TIA Receivers KPDX150MB-T

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### Characteristics

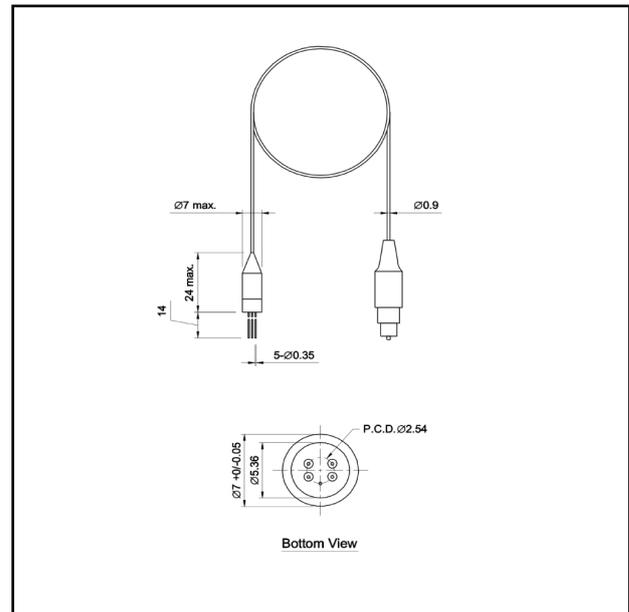
- High sensitivity -39dBm
- Low noise and high speed TIA
- 156Mbps (OC-3)
- AGC circuit
- PD monitoring current output 5 pin package
- LC ROSA type optional

### Applications

- Optical communications
- Optical LAN
- OE converters

### Package

- PIGTAIL



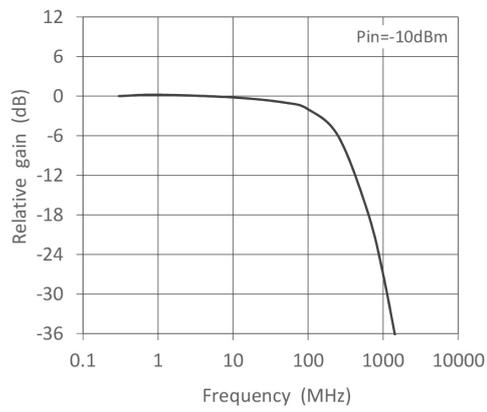
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Supply voltage	$V_{cc}$	4.5	V	-
Operating temperature	$T_{opr}$	-40 to +85		-
Storage temperature	$T_{stg}$	-40 to +85		-

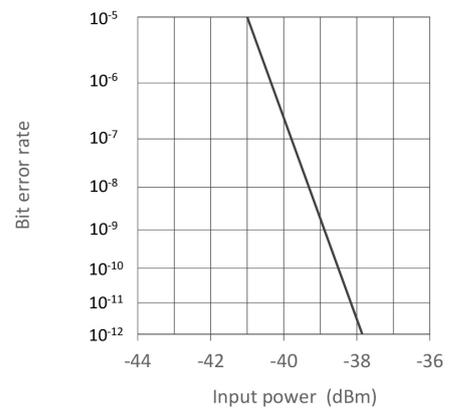
Electrical and Optical characteristics ( $T_a=25$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Sensitive wavelength		900	-	1700	nm	-
Operating voltage	$V_{op}$	3	3.3	3.6	V	-
Supply current	$I_{cc}$	12	22	32	mA	$V_{op}=3.3V$
Bit rate	BR	-	156	-	Mbps	-
Bandwidth @-3dB	BW	110	140	-	MHz	$R_L=50$ $P_i=-10dBm$ Small signal modulation
Optical sensitivity	$P_{min}$	-	-39	-	dBm	Single ended BER= $10^{-10}$
Output impedance	$Z_o$	25	40	100		single ended
Differential output voltage	$V_o$	-	-	800	mVpp	Differential ( $R_L=500$ Single)
Photo-electric conversion efficiency	$PE$	22.8	26	-	kV/W	Single ended $R_L>50$

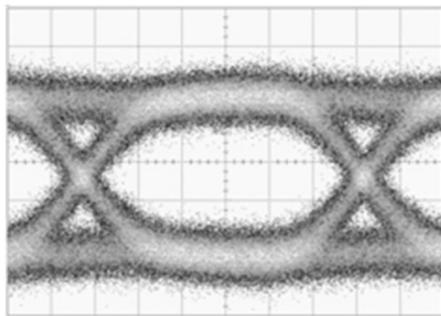
### Frequency Response



### Bit Error Rate



### Eye Diagram



Hor. 1ns/div, Ver. 5mV/div, Pi=-36dBm, BR=155Mbps

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