

GaAs PD-TIA Receivers

KPGX4G-LR33S

Characteristics

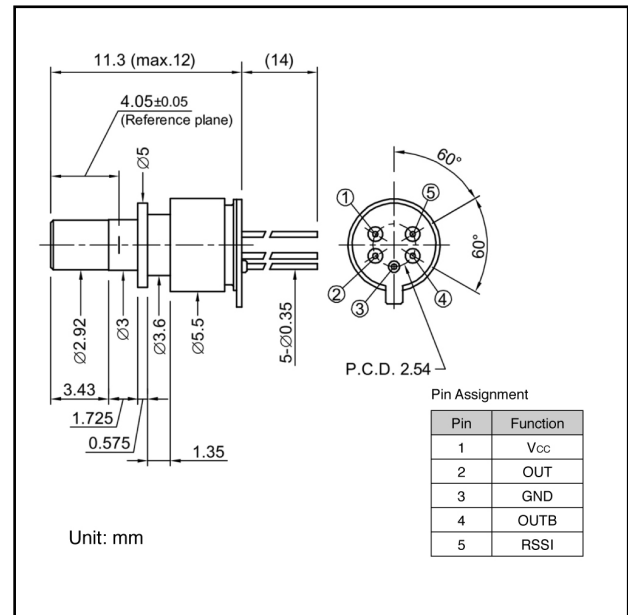
- Low noise and high speed transimpedance amplifier built-in for optical data links in the wavelength of 850nm
- High reliability
- 5 pin package available for an independent PD connection or input power monitoring

Applications

- High speed data communications
- 1x/2x/4x Fiber Channel receivers
- Gigabit ethernet

Package

- LC-ROSA



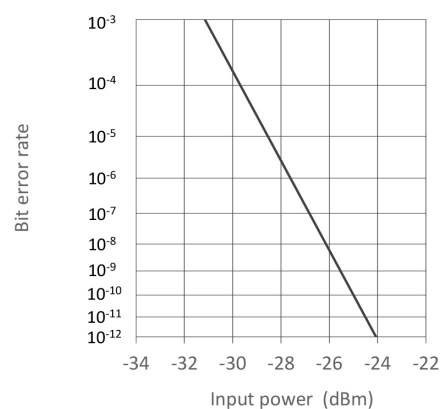
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Supply voltage	V_{cc}	-0.3 to 4.0	V	-
Operating temperature	T_{opr}	-40 to +85		-
Storage temperature	T_{stg}	-40 to +85		-

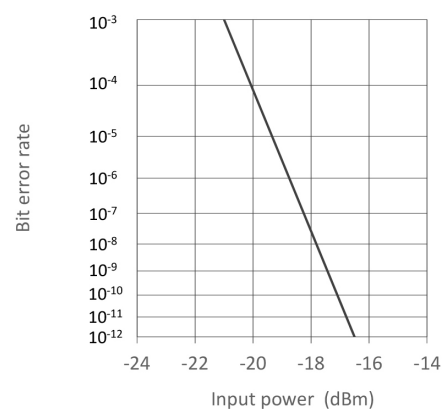
Electrical and Optical characteristics ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Sensitive wavelength		650	-	880	nm	-
Operating voltage	V_{op}	3	3.3	3.6	V	-
Supply current	I_{cc}	11	17	25	mA	-
Bit rate	BR	-	4.25G	-	bps	-
Bandwidth @-3dB	BW	2.2	2.8	-	GHz	$R_L=50$ $P_i=-10\text{dBm}$
Optical sensitivity	P_{min}	-	-17	-	dBm	Single ended BER= 10^{-10}
Output impedance	Z_o	40	50	60		single ended
Differential output voltage	V_o	70	100	165	mVpp	$R_L=50$
Photo-electric conversion efficiency	PE	-	1.5	-	kV/W	Single ended $R_L=50$

Bit Error Rate - KPGX2GK



Bit Error Rate - KPGX4G



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