

## GaAs PD-TIA Receivers

### KPGX2GK-LR33S

#### Characteristics

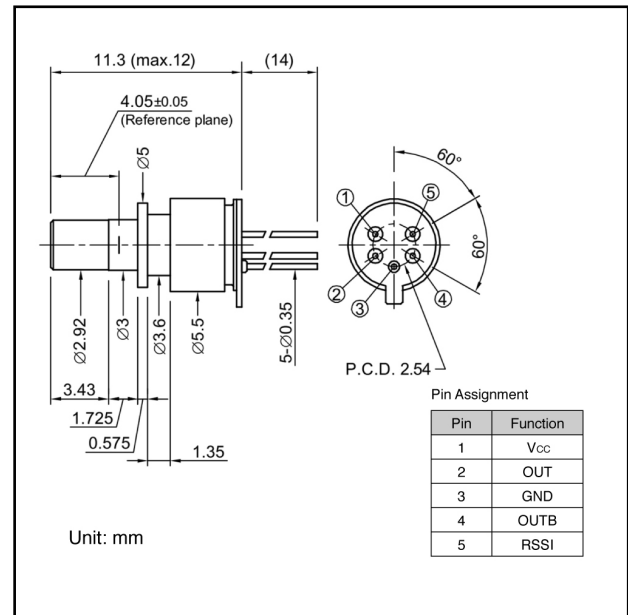
- Low noise and high speed transimpedance amplifier built-in for optical data links in the wavelength of 850nm
- High reliability
- 5 pin package available for an independent PD connection or input power monitoring

#### Applications

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

#### Package

- LC-ROSA



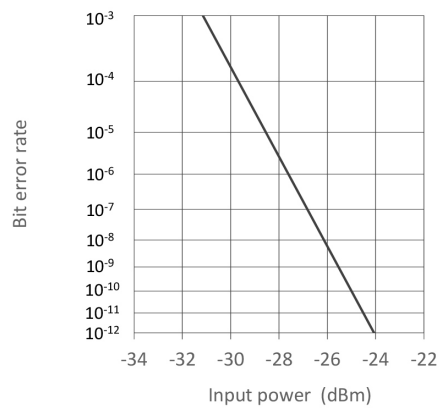
## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Supply voltage	$V_{cc}$	-0.5 to 6.0	V	-
Operating temperature	$T_{opr}$	-40 to +85		-
Storage temperature	$T_{stg}$	-40 to +85		-

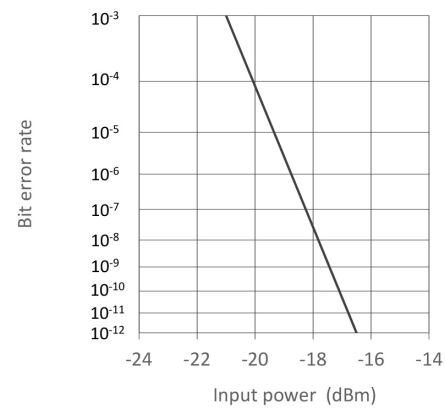
Electrical and Optical characteristics ( $T_a=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Sensitive wavelength		650	-	880	nm	-
Operating voltage	$V_{op}$	3	3.3	3.6	V	-
Supply current	$I_{cc}$	-	48	-	mA	-
Bit rate	BR	-	2.5	-	Gbps	-
Bandwidth @-3dB	BW	-	1.8	-	GHz	$R_L=50$ $P_i=-10\text{dBm}$
Optical sensitivity	$P_{min}$	-	-25	-	dBm	Single ended BER= $10^{-10}$
Output impedance	$Z_o$	40	50	60		single ended
Differential output voltage	$V_o$	160	200	240	mVpp	$R_L=50$
Photo-electric conversion efficiency	PE	-	6.25	-	kV/W	Single ended $R_L=50$

Bit Error Rate - KPGX2GK



Bit Error Rate - KPGX4G



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