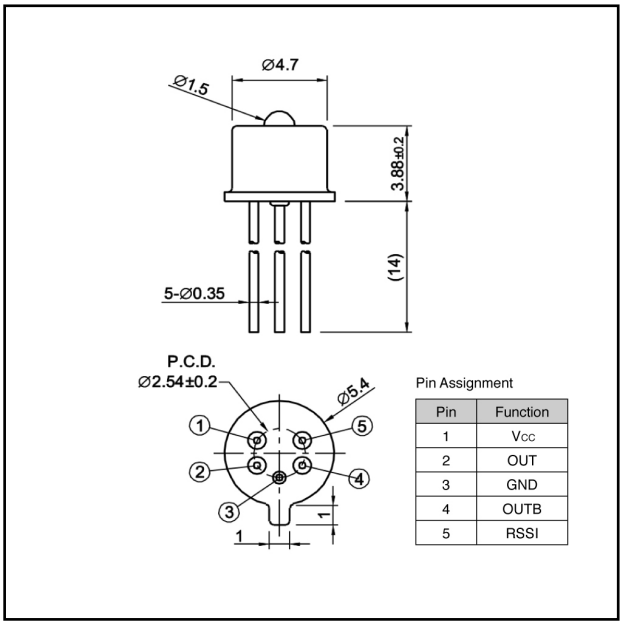
GaAs PD-TIA Receivers

KPGX1GK-H33



Pin Assignment

Pin	Function
1	Vcc
2	OUT
3	GND
4	OUTB
5	RSSI

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

- TO-CAN

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Supply voltage	V_{cc}	-0.5 to 6.5	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	λ	650	-	880	nm	-
Operating voltage	V_{op}	3	3.3	3.6	V	-
Supply current	I_{cc}	30	42	55	mA	-
Bit rate	BR	-	1.25	-	-	-
Bandwidth @-3dB	BW	-	800	-	MHz	R_L=50Ω P_i=-10dBm
Optical sensitivity	P_{min}	-	-24	-	dBm	Single ended BER=10^{-10}
Output impedance	Z_o	-	50	-	Ω	single ended
Differential output voltage	V_o	-	400	-	mVpp	differential R_L=100Ω
Photo-electric conversion efficiency	η_{PE}	-	11	-	kV/W	Single ended R_L=50Ω

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