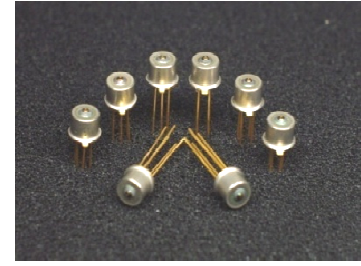


### Feature

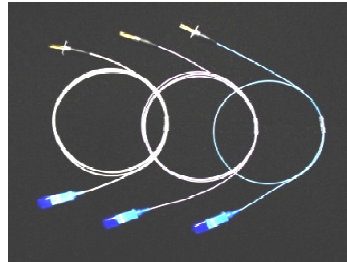
- High sensitivity (-28dBm)
- Low noise high speed TIA
- 10Gbps (OC-192)
- APD current monitoring output
- 5 pin coaxial package

### Applications

- Optical communications
- Optical LAN
- OE converters



CAN type



Pigtail type



ROSA type

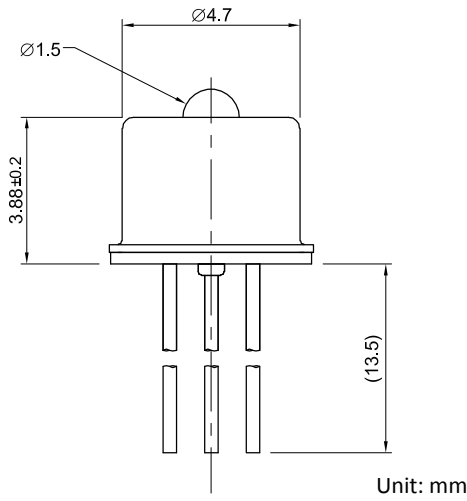
### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Note
Supply voltage	$V_{CC}$	0 to 4.0	V	
Maximum optical power input	$P_{imax}$	0.1	mW	
Operating temperature	$T_{opr}$	-40 to +85	°C	
Storage temperature	$T_{stg}$	-40 to +85	°C	

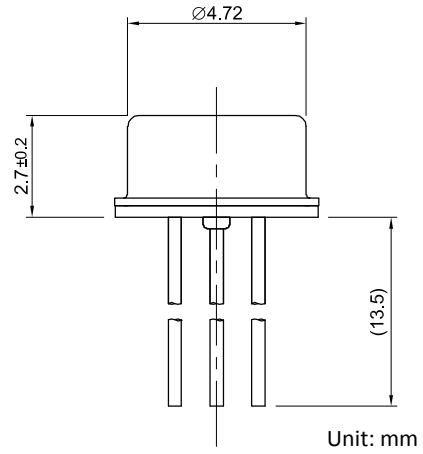
### Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating voltage	$V_{op}$	3.1	3.3	3.5	V	
Supply current	$I_{CC}$	-	55	68	mA	$V_{CC}=3.1$ to $3.5$
Breakdown voltage	$V_B$	25	30	40	V	$I_D=10\mu A$
Dark current	$I_D$	-	25	100	nA	$V_R=V_B \times 0.9$
Responsivity	R	0.7	0.85	-	A/W	$\lambda=1550nm$ , $M=1$
Bandwidth @-3dB	BW	-	9.0	-	GHz	$P_i=-20dBm$ , $M=10$
Optical sensitivity	$P_{imin}$	-25	-28	-	dBm	BER= $10^{-12}$ with $2^{23}-1$ PRBS at 10Gbps
Transimpedance	$Z_t$	1.8	2.4	3.0	k $\Omega$	$P_i=-20dBm$ , $M=10$ $R_i=50\Omega$ , differential

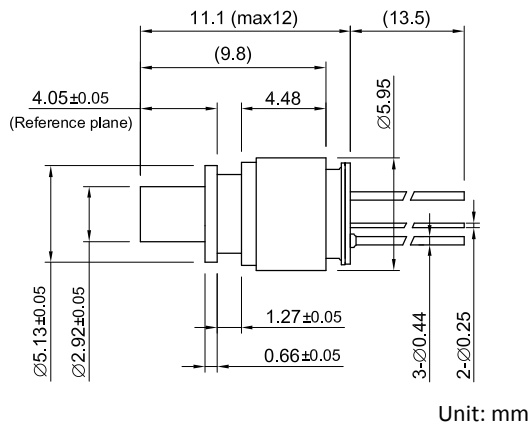
Ball lens type



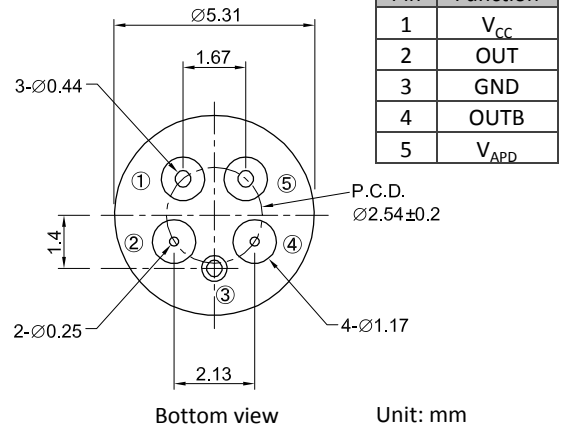
Flat window type



ROSA type

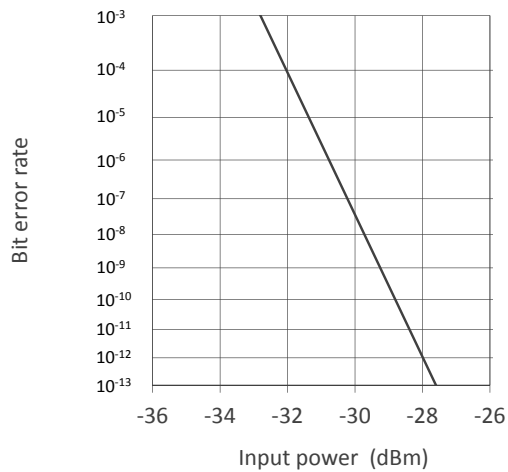


Pin assignment

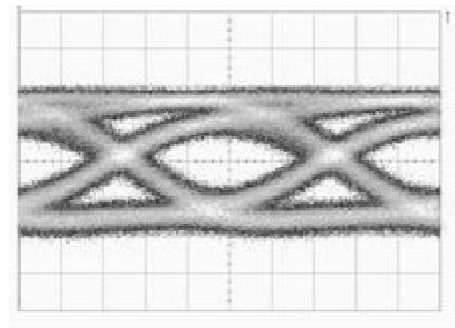


\* Pin assignment may differ in some models. Please refer to the latest information before use.

Bit Error Rate



Eye Diagram



Hor.:20ps/div, Ver.:30mV/div  
Pi=-28dBm, BR=10Gbps, single ended

- Specifications, characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (EU2002/95/EC).

**Opto-technologies for the Future**



---

## KYOSEMI CORPORATION

<http://www.kyosemi.co.jp/>

**Headquarters :** 949-2 Ebisucho Fushimi-ku, Kyoto 612-8201 Japan

TEL: +81-75-605-7311

**Tokyo Sales Office:** 24<sup>th</sup> Sky Bldg.2F, 1-34-3 Shinjuku Shinjuku-ku, Tokyo 160-0022 Japan

TEL: +81-3-5312-5360

**Kansai Sales Office:** 949-2 Ebisucho Fushimi-ku, Kyoto 612-8201 Japan

TEL: +81-75-605-7311

**Kyosemi Opto America Corp:** 4655 Old Ironsides Suite 230 Santa Clara, California 95054 USA

TEL: +1-408-492-9361

**Eniwa Operation:** 385-31 Toiso Eniwa-shi, Hokkaido 061-1405 Japan

TEL: +81-123-34-3111

**Kamisunagawa Operation:** 70-1 Kamisunagawa Kamisunagawa-cho Sorachi-gun, Hokkaido 073-0200 Japan

TEL: +81-125-62-3611