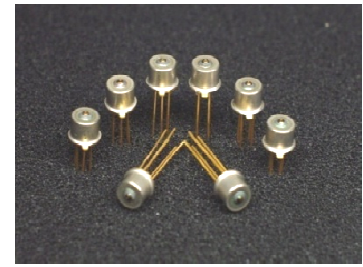


**Features**

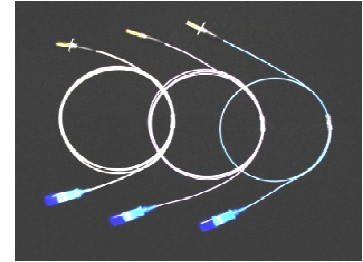
- High sensitivity -29dBm
- Low noise and high gain transimpedance amplifier built-in to meet OC-48
- Products available for OC-48, 2.5Gbps
- AGC circuit built-in
- 5 pin package available for an independent PD connection
- Pigtail type and LC-ROSA are available as an option



CAN type

**Applications**

- Optical communications
- Optical LAN
- OE converters



Pigtail type

**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Supply voltage	$V_{CC}$	-0.5 to +6.5	V	
Maximum optical power input	$P_{imax}$	4	mW	
Operating temperature	$T_{opr}$	-40 to +85	°C	
Storage temperature	$T_{stg}$	-40 to +85	°C	

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating voltage	$V_{op}$	3.0	3.3	3.6	V	
Supply current	$I_{CC}$	40	48	60	mA	
Bit rate	BR	-	2.5	-	Gbps	-
Bandwidth @-3dB	BW	-	1.8	-	GHz	$R_L=50\Omega$ , $P_i=-10\text{dBm}$ , Small signal modulation
Optical sensitivity	$P_{min}$	-	-29	-	dBm	Differential, BER= $10^{-10}$
Output impedance	$Z_O$	40	50	60	$\Omega$	Single ended
Differential output voltage	$V_O$	320	400	480	mVpp	$R_L=100\Omega$
Photo-electric conversion efficiency	$\eta_{PE}$	-	12.5	-	kV/W	Single ended, $R_L>50\Omega$

### Specifications for Pigtail Type and LC ROSA type

A standard single mode fiber is coupled to a hermetically sealed PD-TIA module.

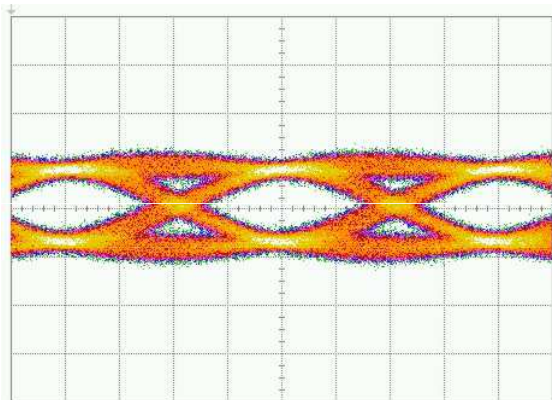
A multimode fiber pigtail is also available as an option.

The plastic LC ROSA provides an efficient coupling with a single or multi mode fiber with a stub.

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

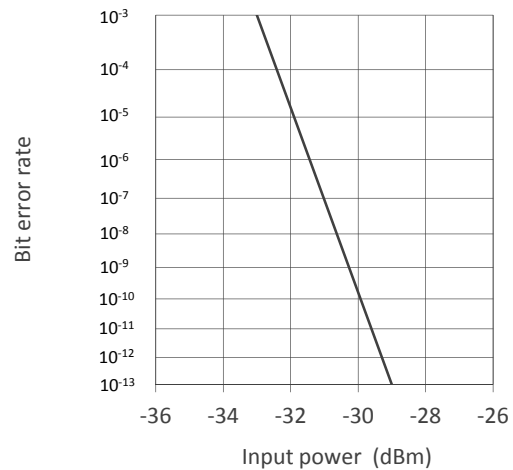
Parameter	Symbol	Specification	Unit	Note
Optical reflection	ORL	27 min.	dB	$\lambda=1310\text{nm}$
Electrical parameters	-	See electric performances of PD-TIA device	-	
Fiber type	-	Single mode fiber	-	Only for pigtail type
Fiber connector type	-	SC connector	-	
Mode field diameter	-	$9.5 \pm 1$	$\mu\text{m}$	
Clad diameter	-	$125 \pm 2$	$\mu\text{m}$	
Differential index	-	$0.3 \pm 0.04$	%	
Fiber diameter	-	$0.9 \pm 0.1$	mm	
Fiber length	-	$1100 \pm 100$	mm	
Minimum bending radius	-	20	mm	

#### Eye Diagram



Hor. 100ps/div, Ver. 20mV/div, Pi=-26dBm,  
BR=2.488Gbps, Single ended

#### Bit Error Rate



- 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**



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