

Features

- : GaAs PIN PD
- : 1.25 Gbps data rates
- : Packaged with preamplifier
- : Other configurations available on request

Applications

- : High speed Data Communications
- : Gigabit Ethernet
- : Fiber Channel

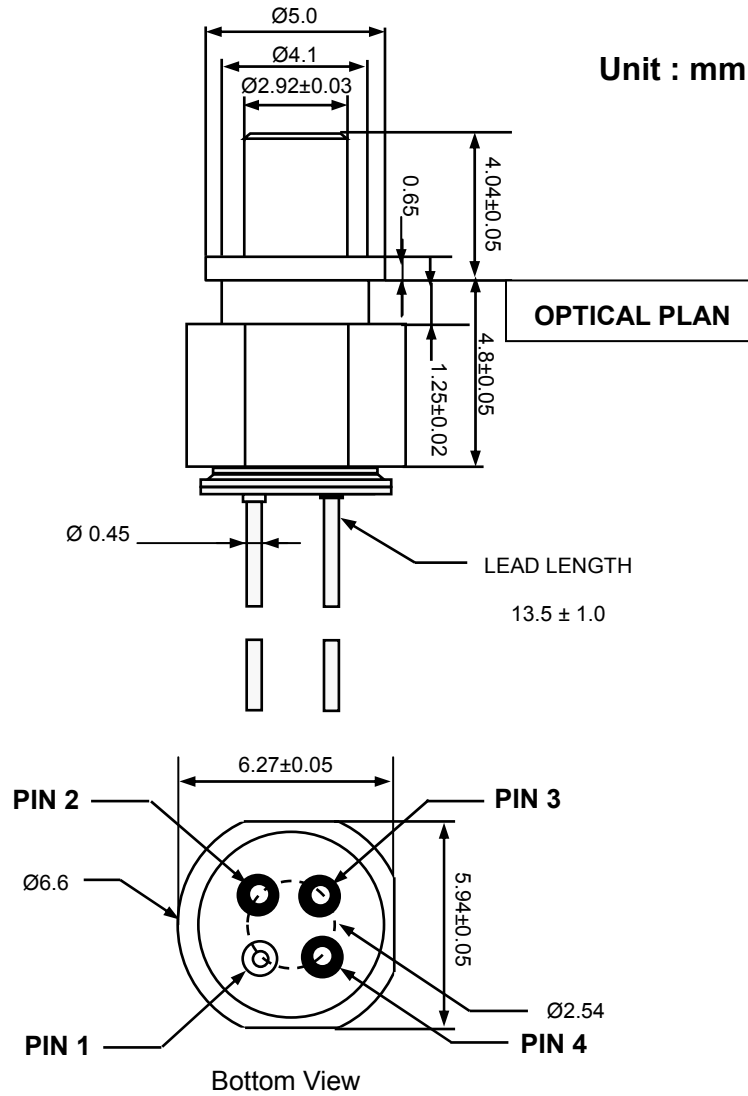
Description



Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 100 °C
Operating Temperature	0 to 70 °C
Lead Solder Temperature	260 °C, 10 sec
Power Supply Voltage	-0.5 to 6.0 V
Incident Optical Power	0 dBm average, 4 dBm Peak

Dimensions



PIN OUT

Number	Function
1	GND
2	V_{OUT+}
3	V_{CC}
4	V_{OUT-}

Electro-Optics Characteristics ($V_{CC}=3.3V$, $T_a=25^{\circ}C$ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Supply Voltage	V_{CC}	3.0	3.3	5.5	V	
Supply Current	I_{CC}		26	50	mA	
Differential Responsivity	R_D	900	1500	2200	V/W	$R_{load} = 100 \text{ ohm}$, $P = -15 \text{ dBm}$, 850 nm
Wavelength	λ	760	850	860	nm	
Optical Overload	P_{Max}	0			dBm	
Maximum Differential Output Voltage	V_O	185	250	415	mV _{p-p}	$P = 0 \text{ dBm}$, 850 nm
Differential Transimpedance		2260	2800	3400	Ohm	
Small signal Bandwidth	BW	750	920	1100	MHz	
Low Frequency Cut off	LF		44		KHz	
Single-ended Output Impedance	RS	48	50	52	Ω	
Sensitivity	S	-21	-24		dBm	$BER=1 \times 10^{-12}$, PRBS 2 ⁷ -1, 850 nm
Rise/Fall Time	t_R/t_F		250	400	ps	20%~80%

Notes

* These specifications are subject to change without notice

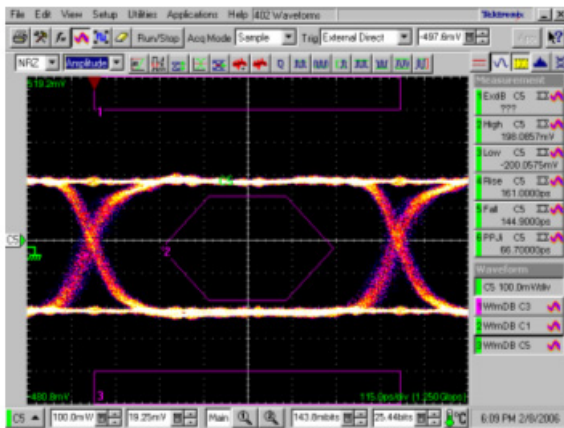
NOTICE

The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

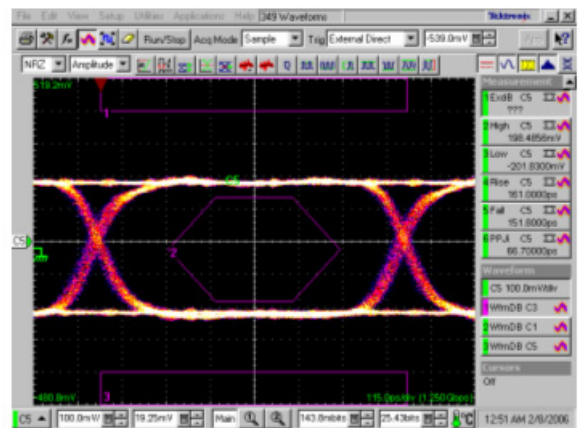
Characteristics Curves

Eye Diagrams

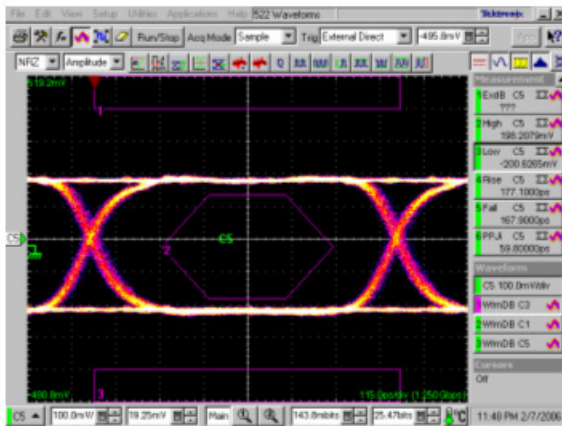
at -20°C



at RT



at 70°C



Test Conditions

- Source: Optowell 1.25 Gb/s TOSA
- 10 dB Extinction Ratio
- PRBS $2^7 - 1$
- Eye diagrams @ -18 dBm average
- Wavelength : 850nm

Sensitivity

