

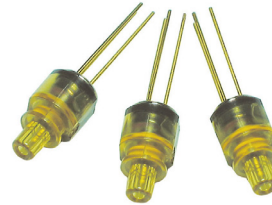
Features

- : GaAs PIN PD LC ROSA
- : Multi rate capable up to 2.5 Gbps
- : Packaged with preamplifier
- : Other configurations available on request

Applications

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

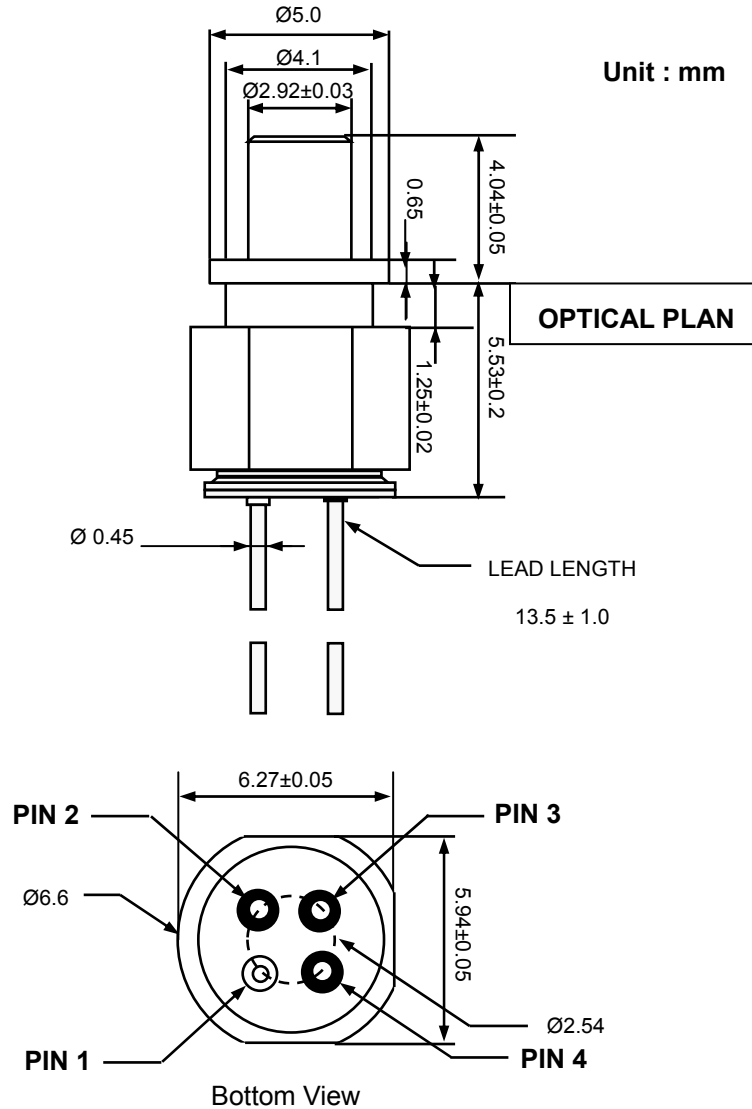
Description



Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 100 °C
Operating Temperature	-40 to 85 °C
Lead Solder Temperature	260 °C, 10 sec
Power Supply Voltage	0 to 5.0 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 ($V_{CC}=3.3V, AC$ coupled to $50\Omega, T_a=25^\circ C$ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Wavelength Responsivity	λ	770	850	860	nm	
Supply Voltage	V_{CC}	3.0	3.3	3.6	V	
Supply Current	I_{CC}	18	25	35	mA	
Small Signal Differential Responsivity	R_{DIFF}	3000	4200		V/W	$P_{ave}=-20dBm, \lambda=850nm$
Sensitivity	S	-21	-23		dBm	BER= 1×10^{-12} , PRBS= 2^7-1 at 1.0625Gbps
		-20	-22		dBm	BER= 1×10^{-12} PRBS= 2^7-1 at 2.125Gbps
Optical Overload	OL		0		dBm	
Single-ended Saturated Output Swing	$V_{o,sat}$	100	140		mV _{pp}	
Differential Saturated Output Swing	$V_{o,sat,diff}$	200	280		mV _{pp}	
3dB Bandwidth	$f_{h,-3dB}$		1.8		GHz	$P_{ave}=-20dBm, \lambda=850nm$, referenced to 100MHz
Low Frequency Cutoff	$f_{l,-3dB}$			100	KHz	
Electrical Return Loss	S_{44}		-10		dB	10KHz to 2.5GHz
Rise/Fall Time	t_R/t_F		130		ps	$P_{ave}=-20dBm, \lambda=850nm$
Output Resistance	R_o		50		Ω	Single-ended
PD Bias Voltage	V_{PD}		2.4		V	

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