

Features

- : GaAs PIN PD
- : 2.5 Gbps data rates
- : Flat window type TO-46 Can Package
- : Packaged with preamplifier
- : Other configurations available on request

Applications

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

Description

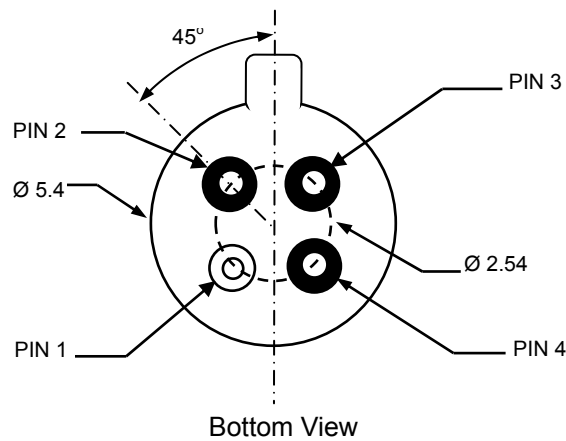
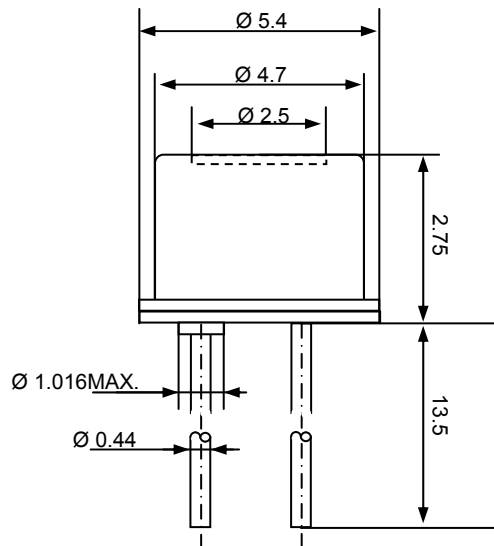


Absolute Maximum Ratings

| Parameter | Rating |
|-------------------------|---------------------------|
| Storage Temperature | -40 to 100 °C |
| Operating Temperature | -20 to 85 °C |
| Lead Solder Temperature | 260 °C, 10 sec |
| Power Supply Voltage | -0.5 to 4.0 V |
| Incident Optical Power | 0 dBm average, 4 dBm Peak |

Dimensions

Unit:mm



PIN OUT

| Number | Function |
|--------|-----------------|
| 1 | GND |
| 2 | Vout + |
| 3 | V _{CC} |
| 4 | Vout - |

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. | | |
| Small Signal Single-ended Responsivity | R | | 2100 | | V/W | Optical input signal of |
| Small Signal Differential Responsivity | R_{diff} | | 4200 | | V/W | $P_{ave}=-20dbm, \lambda=850nm$ |
| Sensitivity | S | -18 | -21 | | dBm | BER=1e-12 with 2.5Gbps optical input data of PRBS=2^31-1, |
| Optical Overload | OL | | 0 | | dBm | Re=10dB, $\lambda=850nm$ |
| 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 | $f_{h,-3dB}$ | 1.6 | 1.8 | | GHz | Optical input signal of $P_{ave}=-20dBm, \lambda=850nm$, referenced to 50MHz |
| Low Frequency Cutoff | $f_{l,-3dB}$ | | | 100 | KHz | Optical input signal of $P_{ave}=-20dBm, \lambda=850nm$, referenced to 1MHz |
| Electrical Return Loss | S_{44} | | -10 | | dB | 10KHz to 2.5GHz |
| Rise/Fall Time | t_r/t_f | | 130 | | ps | Optical input signal of $P_{ave}=-20dBm, \lambda=850nm$ |
| Output Resistance | R_o | 40 | 50 | 60 | Ω | Single-ended |
| Supply Voltage | V_{CC} | 3.0 | 3.3 | 3.6 | V | |
| Supply Current | I_{CC} | 18 | 25 | 35 | mA | |
| 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