



RLC-P85P426-3V

2.5Gbps LC Connectorized GaAs PIN plus Pre-Amplifier Photodiode

Overview

The Lasermate RLC-P85P426-3V is a high speed, 770nm-860nm wavelength spectral range, GaAs photodiode, LC receptacle designed for use in fiber optic data communication applications.



Features

- Pre-aligned LC-type receptacle for multi-mode fiber communication
- Design for Small Form Factor transceivers
- Suitable to run 1.0625Gbps to 2.5Gbps
- With opposite data output pin assignment
- Single power supply +3.3V

Specifications

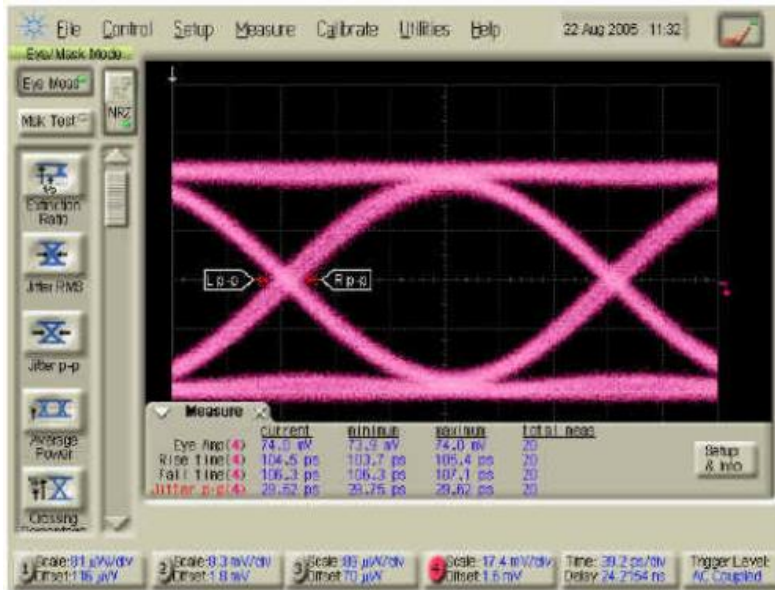
| Absolute Maximum Ratings | | | | |
|--------------------------|------|------|------|------------|
| Parameters | Min. | Max. | Unit | Conditions |
| Storage Temperature | -40 | 100 | °C | |
| Operating Temperature | -40 | 85 | °C | |
| Lead Solder Temperature | | 260 | °C | 10 seconds |

| Electro-Optical Characteristics (Typical values are at +3.3V at 25 °C) | | | | | | |
|--|-----------|------|------|------|-------------|---|
| Parameters | Symbol | Min. | Typ. | Max. | Unit | Conditions |
| Power Supply | V_{CC} | 3.0 | 3.3 | 3.6 | V | |
| Supply Current | I_{CC} | | 25 | 35 | mA | no loads |
| Differential Responsivity | R_d | 1.8 | 2.6 | 3.8 | mV/ μ W | $R_{load}=100\text{ohm}$, $P=-15\text{dBm}$, $\lambda=850\text{nm}$ |
| Single Ended Responsivity | R_s | 0.9 | 1.3 | 1.9 | mV/ μ W | $R_{load}=50\text{ohm}$, $P=-15\text{dBm}$, $\lambda=850\text{nm}$ |
| Small-Signal Bandwidth | BW | 1.6 | | | GHz | $P=-15\text{dBm}$ |
| Low-Frequency Cut off | LF | | | 100 | kHz | |
| Rise / Fall Time (20%~80%) | tr/tf | | 115 | 200 | ps | $P=-15\text{dBm}$, $\lambda=850\text{nm}$ |
| Saturation Power | P_{Sat} | 0 | | | dBm | |
| Single Ended Output Impedance | R_O | | 50 | | ohm | |
| Maximum Differential Output Voltage | | 220 | 280 | | mV p-p | $R_{load}=100\text{ohm}$, $P=0\text{dBm}$, $\lambda=850\text{nm}$ |
| Wavelength | λ | 770 | | 860 | nm | |
| Sensitivity | | | | -20 | dBm | $\lambda=850\text{nm}$ @2488.32Gbps, PRBS7, ER=10dB, BER=1E-10 |

Typical Characteristics

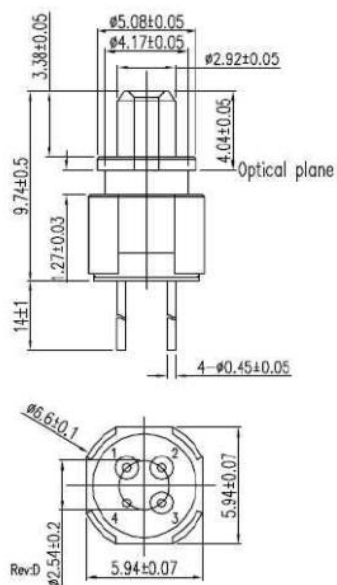
Eye Diagram

$R_{load} = 50\Omega$, $P = -15\text{dBm}$ @2488.32Mbps, 850nm, PRBS 7.



$t_r=104.5\text{ps}$, $t_f=106.3\text{ps}$, Jitter p-p=29.62ps

Outline Dimensions (unit: mm)



Note: Specifications are subject to change without notice.