



## RLC-P85P8256-3V

### 25Gbps LC Connectorized GaAs PIN PD plus Pre-Amplifier with Flex

#### Overview

The Lasermate RLC-P85P8256-3V is a high speed, 25Gbps, 770nm-860nm wavelength spectral range, GaAs photodiode, LC receptacle with flexible circuit designed for use in fiber optic data communication applications.



#### Features

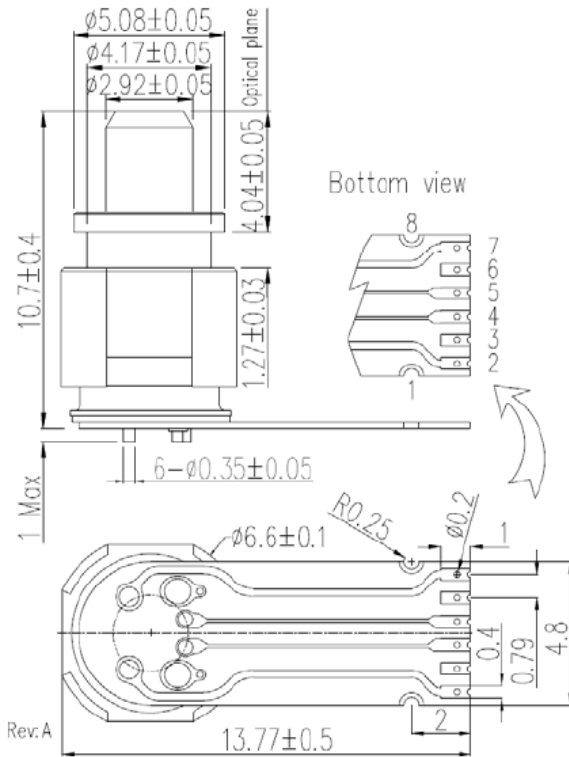
- LC-type optical submodule with flexible circuit attached
- Design for Small Form Pluggable transceivers
- Supports up to 25.78125Gbps application
- Photocurrent monitoring available
- Single power supply +3.3V

#### Specifications

| Absolute Maximum Ratings |      |      |      |            |
|--------------------------|------|------|------|------------|
| Parameters               | Min. | Max. | Unit | Conditions |
| Storage Temperature      | -40  | 100  | °C   |            |
| Operating Temperature    | -20  | 85   | °C   |            |
| Lead Solder Temperature  |      | 260  | °C   | 10 seconds |
| Flex Attach Temperature  |      | 370  | °C   | 10 seconds |

| Electro-Optical Characteristics (T <sub>A</sub> = 25°) |                  |      |      |       |       |   |
|--|------------------|------|------|-------|-------|---|
| Parameters   | Symbol           | Min. | Typ. | Max.  | Unit  | Conditions  |
| Power Supply   | V <sub>CC</sub>  | 3.0  | 3.3  | 3.5   | V     |   |
| Supply Current   | I <sub>CC</sub>  |      | 31   | 45    | mA    | no loads  |
| Differential Responsivity                              | R <sub>d</sub>   |      | 0.45 |       | mV/uW | R <sub>load</sub> =100ohm, P=-10dBm, λ=850nm      |
| TIA RSSI   | Slope            |      | 1    |       | mA/mA |   |
|  | Offset           |      | 6    | 10    | nA    |   |
|  | Accuracy         |      | 1    | 2     | %     |   |
| Small-Signal Bandwidth                                 | BW               |      | 17   |       | GHz   | In TIA linear gain region                         |
| Low-Frequency Cut off                                  | LF               |      | 30   |       | kHz   |   |
| Saturation Power                                       | P <sub>Sat</sub> | 2    |      |       | dBm   | λ=850nm @25.78125Gbps, PRBS31, ER=4.7dB, BER=5E-5 |
| Single Ended Output Impedance                          | R <sub>O</sub>   |      | 50   |       | ohm   |   |
| Wavelength   | λ                | 770  |      | 860   | nm    |   |
| Sensitivity  |                  |      |      | -14.5 | dBm   | λ=850nm @25.78125Gbps, PRBS31, ER=4.7dB, BER=5E-5 |

**Outline Dimensions (unit: mm)**



**Pinout:**

| Pin no. | Function |
|---------|----------|
| 1       | Gnd      |
| 2       | Vcc      |
| 3       | Gnd      |
| 4       | Dout(-)  |
| 5       | Dout(+)  |
| 6       | Gnd      |
| 7       | Isource  |
| 8       | Gnd      |

Note: Specifications are subject to change without notice.