



RLC-P85A34G

4.25Gbps High Speed GaAs PIN Photodiode in LC Receptacle

Data Sheet



Overview

The Lasermate RLC-P85A34G is a high-speed, high-reliability GaAs PIN photodiode, housed in an LC receptacle. It features a 5GHz bandwidth optimized for 4.25Gbps fiber optic data communication applications. This device delivers excellent performance with low dark current and low capacitance, ensuring reliable operation across a wide temperature range from -40°C to +85°C.

Features

- Fiber-coupled GaAs photodiode
- Supports data rates up to 4.25Gbps
- High reliability design
- Low dark current
- Low capacitance
- Wide operating temperature range: -40°C to +85°C

Applications

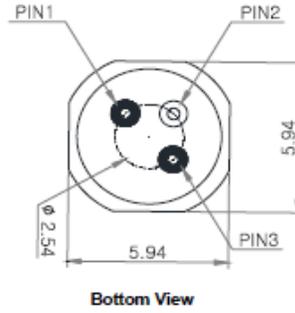
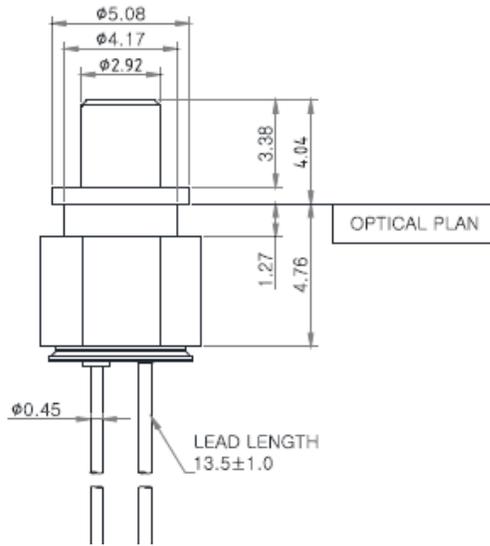
- High speed data communications
- Gigabit Ethernet
- Fiber Channel

Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	100	°C	
Operating Temperature	-40	85	°C	
Soldering Temperature		260	°C	10 seconds
Forward Current		10	mA	
Reverse Voltage		40	V	

Electro-Optical Characteristics (CW @ T=25°C)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Responsivity	R	0.45	0.55		A/W	$V_R=1.6V, \lambda=850nm$
Dark Current	I_D		0.1	1.0	nA	$V_R=1.6V$
Breakdown Voltage	V_{BD}	40			V	$I_R=1\mu A$
Capacitance	C		0.38	0.45	pF	$V_R=1.6V, f=1MHz$
Bandwidth	F_{-3dB}		5		GHz	$V_R=1.6V$
Rise and Fall Times	t_r/t_f		60/60		ps	$V_R=1.6V, 20\% \sim 80\%$
Central Wavelength	λ_c		850		nm	

Outline Dimensions (unit: mm)



Pin Configuration

- Pin 1: PD Anode
- Pin 2: NC
- Pin 3: PD Cathode

Note: Specifications are subject to change without notice.