



10Gbps LC Connectorized GaAs PIN plus Pre-Amplifier with Flex

Part No. RLC-P85P8106-3V

Features

- LC-type optical submodule with flexible circuit attached
- Optimized for fiber optic application
- Suitable for short wavelength 10.3125Gbps 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	-40	85	°C	
Lead Solder Temperature		260	°C	10 seconds
Flex Attach Temperature		370	°C	10 seconds

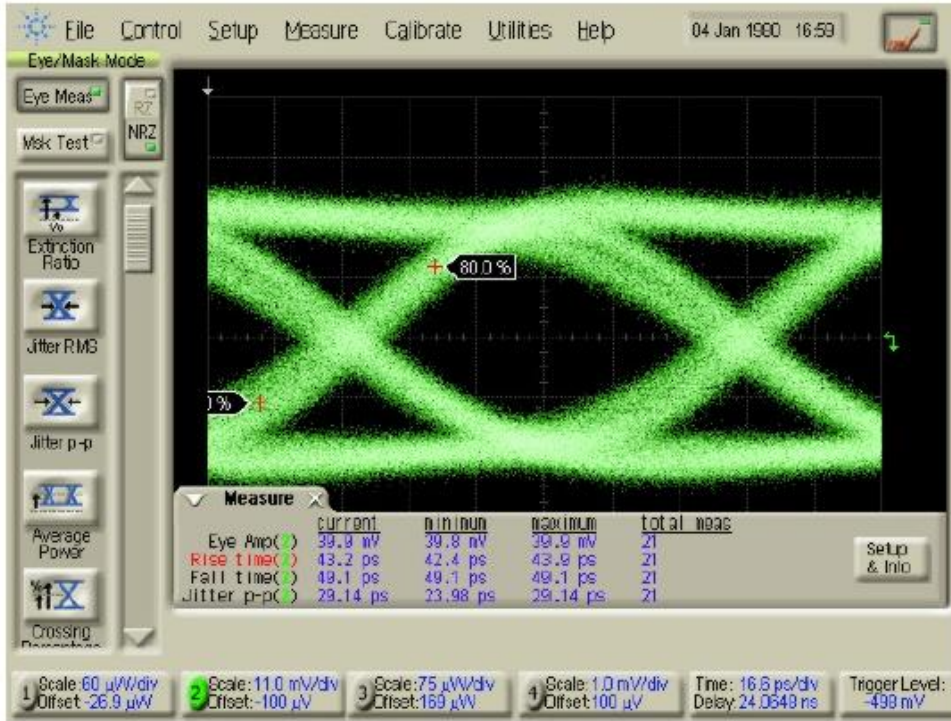
Electro-Optical Characteristics (CW @ T _c = 25°C unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Power Supply	V _{CC}	3.0	3.3	3.6	V	
Supply Current	I _{CC}		34	45	mA	no loads
Differential Responsivity	R _d	0.4	0.6	1.0	mV/μW	R _{load} =100ohm, P=-12dBm, λ=850nm
Single Ended Responsivity	R _s	0.2	0.3	0.5	mV/μW	R _{load} =50ohm, P=-12dBm, λ=850nm
TIA RSSI				1.5	mA	Linear
Small-Signal Bandwidth	BW		7		GHz	P=-12dBm
Low-Frequency Cut off	LF		30		kHz	
Rise / Fall Time (20%~80%)	tr/tf		50		ps	P=-12dBm, λ=850nm
Saturation Power	P _{sat}	0			dBm	
Single Ended Output Impedance	R _O		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-13.5	dBm	λ=850nm @10.3125Gbps, PRBS31, ER=6dB, BER=1E-12



Typical Characteristics

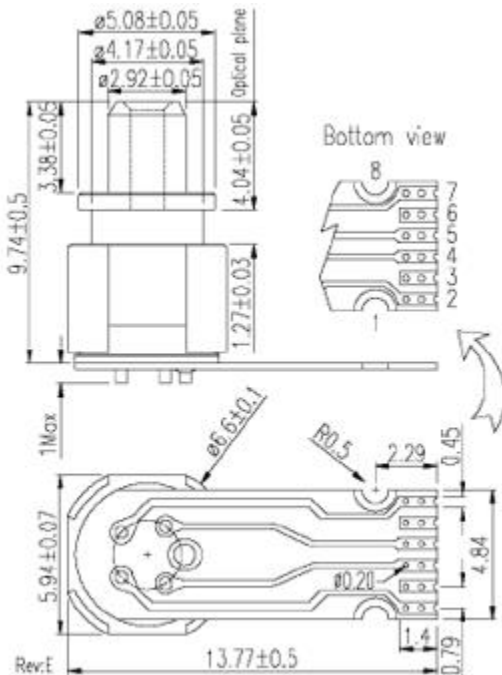
Eye Diagram

$R_{load} = 50\Omega$, $P = -12\text{dBm}$ @ 10.3125Gbps, 850nm, PRBS 31.



$t_r=43.2\text{ps}$, $t_f=49.1\text{ps}$, Jitter p-p= 29.1ps

Outline Dimensions (unit: mm)



- Pin #1: Gnd
- Pin #2: Vcc
- Pin #3: Gnd
- Pin #4: Dout (+)
- Pin #5: Dout (-)
- Pin #6: Gnd
- Pin #7: Isource
- Pin #8: Gnd

Note: Specifications are subject to change without notice.