



FRR-01P-BL5-751

1.25Gbps LC Connectorized InGaAs PIN plus AGC Pre-amplifier

FEATURES:

- Pre-aligned LC-type receptacle for optical fiber communication.
- Design for Small Form Factor transceivers.
- Suitable for long wavelength 1.25Gbps application.
- Photocurrent monitoring available.
- Single power supply +3.3V.



ELECTRO-OPTICAL CHARACTERISTICS: (Typical values are at +3.3V@ 25°C):

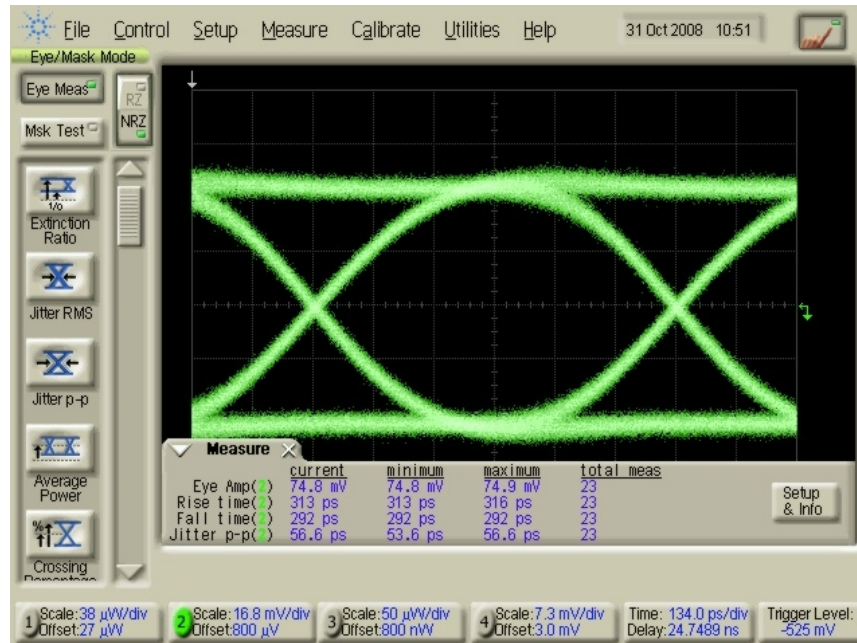
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V _{CC}	3.0	3.3	3.6	V	
Supply Current	I _{CC}		28	35	mA	no loads
Differential Responsivity	R _d	12	18	28	mV/μW	R _{load} = 100ohm, P = -24dBm, λ=1310nm
Single Ended Responsivity	R _s	6	9	14	mV/μW	R _{load} = 50ohm, P = -24dBm, λ=1310nm
Small-Signal Bandwidth	BW	730			MHz	
Low-Frequency Cut off	LF			115	kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf			400	ps	P = -24dBm, λ=1310nm
Saturation Power	P _{Sat}	0			dBm	
Single Ended Output Impedance	R _O		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-27	dBm	λ=1310nm, @1244.16Mbps, PRBS7, ER=10dB, BER=1E-12

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	100	°C	
Operating Temperature	-40	85	°C	
Lead Solder Temperature		260	°C	10 seconds

Eye Diagram :

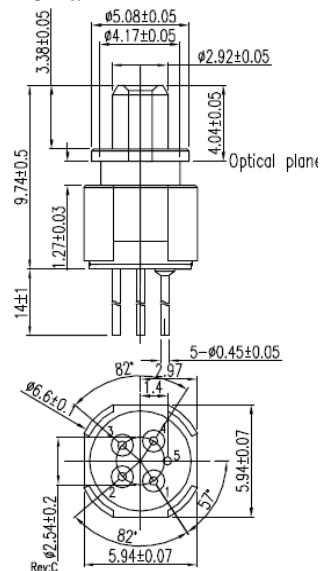
$R_{load} = 50\Omega$, $P = -24\text{dBm}@1.25\text{Gbps}$, 1310nm, PRBS 7,



$t_r=313\text{ps}$, $t_f=292\text{ps}$, Jitter p-p=56.6ps

OUTLINE DIMENSIONS:

• Unit: mm



Pinout: D-5 (Mpd, Isource)

1. Dout
2. Vcc
3. Isource
4. $\overline{\text{Dout}}$
5. Gnd