

FRR-02P-3L5-760

2.5Gbps LC Connectorized InGaAs PIN plus Pre-amplifier

FEATURES:

- Fiber stub LC-type receptacle for optical communication.
- Design for Small Form Factor transceivers.
- Suitable for long wavelength from 2.5Gbps application.
- Photocurrent monitoring available.
- Single power supply +3.3V.



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

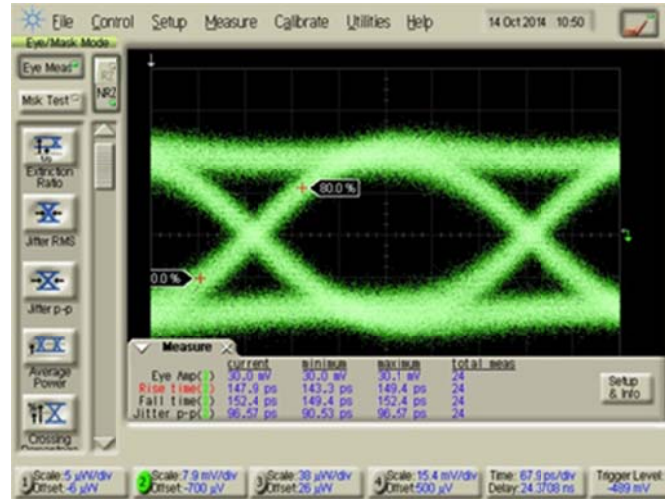
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V _{CC}	3.0	3.3	3.6	V	
Supply Current	I _{CC}	30	34	42	mA	no loads
Differential Responsivity	R _d		16		mV/μW	R _{load} = 100ohm, P = -27dBm, λ=1490nm
Single Ended Responsivity	R _s		8		mV/μW	R _{load} = 50ohm, P = -27dBm, λ=1490nm
Small-Signal Bandwidth	BW	1.4			GHz	
Low-Frequency Cut off	LF		15	25	kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf			200	ps	P = -27dBm, λ=1490nm
Saturation Power	P _{Sat}	0	3		dBm	
Single Ended Output Impedance	R _O		50		ohm	
Wavelength	λ	1260		1620	nm	
Optical Return Loss	ORL	27			dB	λ=1310nm
Sensitivity				-27.5	dBm	T _A =25°C, λ=1490nm,@2488.32Mbps, PRBS23,ER=10dB,BER=1E-10

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 :

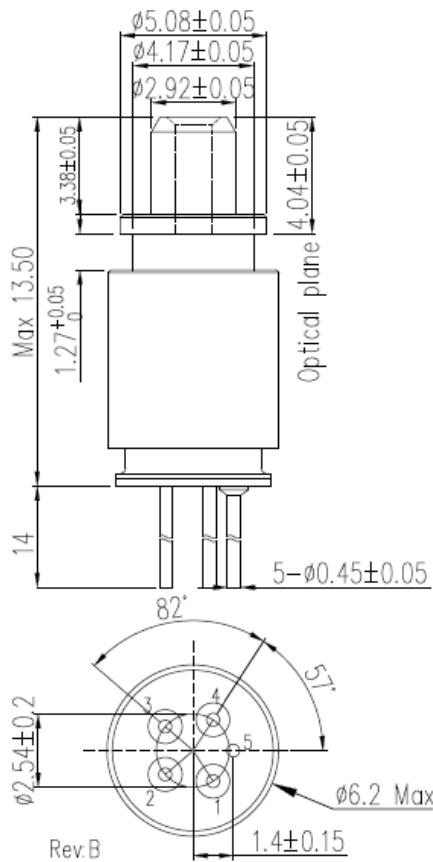
$R_{load} = 50\Omega$, $P = -27\text{dBm}@2488.32\text{Mbps}$, 1490nm , PRBS 23.



$T_r=147.9\text{ps}$, $T_f=152.4\text{ps}$, Jitter p-p= 96.57ps

OUTLINE DIMENSIONS:

• Unit: mm

**Pinout:**

Pin no.	TRR-1H53-760
	Function
1	Dout(+)
2	Vcc
3	Isource
4	Dout(-)
5	Gnd