

TRR-1F53-731

2.5Gbps LC Connectorized InGaAs PIN plus AGC Pre-amplifier

FEATURES:

- Pre-aligned LC-type receptacle for optical fiber communication.
- Designed for Small Form Factor transceivers.
- Suitable for long wavelength 2.5Gbps applications.
- Photocurrent monitoring available.
- Single power supply +3.3V.



ELECTRO-OPTICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$)

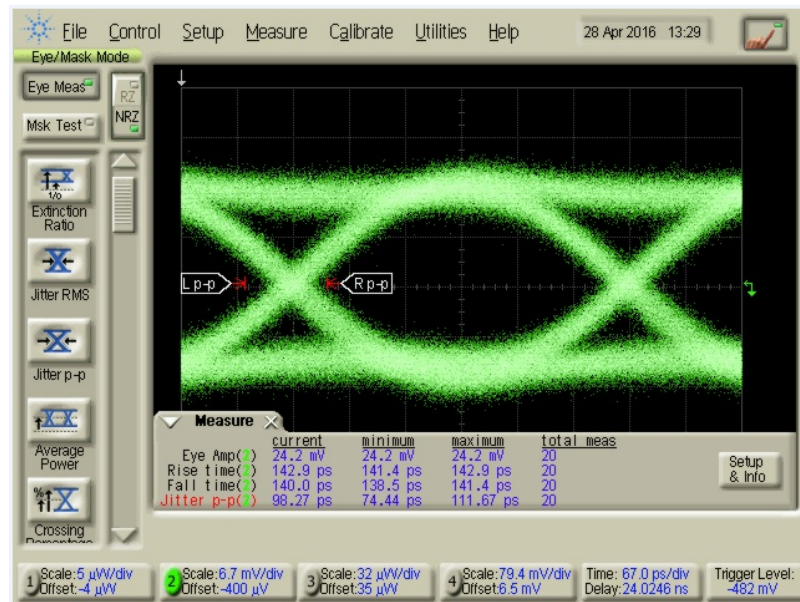
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V _{cc}	3.0	3.3	3.6	V	
Supply current	I _{cc}	14	20	25	mA	no loads
Differential Responsivity	R _d		5.0		mV/ μW	R _{load} = 100ohm P = -23dBm, λ =1310nm
Single Ended Responsivity	R _s		2.5		mV/ μW	R _{load} = 50ohm P = -23dBm, λ =1310nm
Small-signal Bandwidth	BW	1.35			GHz	
Low-Frequency Cut off	LF		30		kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf		200		ps	P = -23dBm, λ =1310nm
Saturation Power	P _{Sat}	0.5			dBm	
Single Ended Output Impedance	R _O		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-25	dBm	λ =1310nm, @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
Damage Power		+5	dBm	

Eye Diagram:

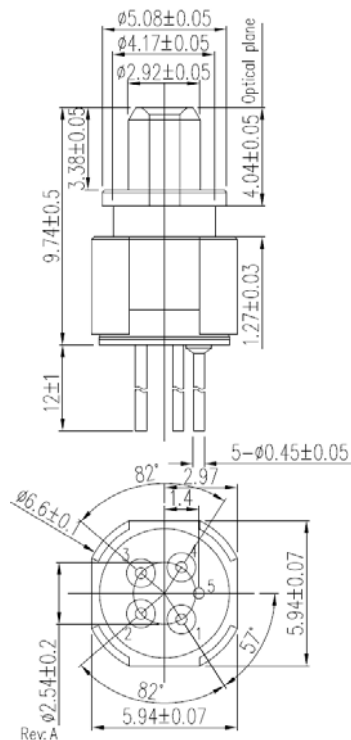
$R_{load} = 50\Omega$, $P = -23\text{dBm}@2488.32\text{Mbps}$, 1310nm, PRBS 23.



$t_r = 142.9\text{ps}$, $t_f = 140.0\text{ps}$, Jitter p-p = 98.27ps

OUTLINE DIMENSIONS:

- Unit: mm

**Pinout:**

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