TRR-1H53-731

2.5Gbps LC Connectorized InGaAs PIN plus AGC Pre-amplifier

FEATURES:

- Fiber stub 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°C)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	Vcc	3.0	3.3	3.6	V	
Supply current	Icc	14	20	25	mA	no loads
Differential Responsivity	Rd		5.0		mV/μW	R_{load} = 100ohm P = -23dBm, λ=1310nm
Single Ended Responsivity	Rs		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	
Optical Return Loss	ORL	27			dB	λ=1310nm
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	T_A = 25°C

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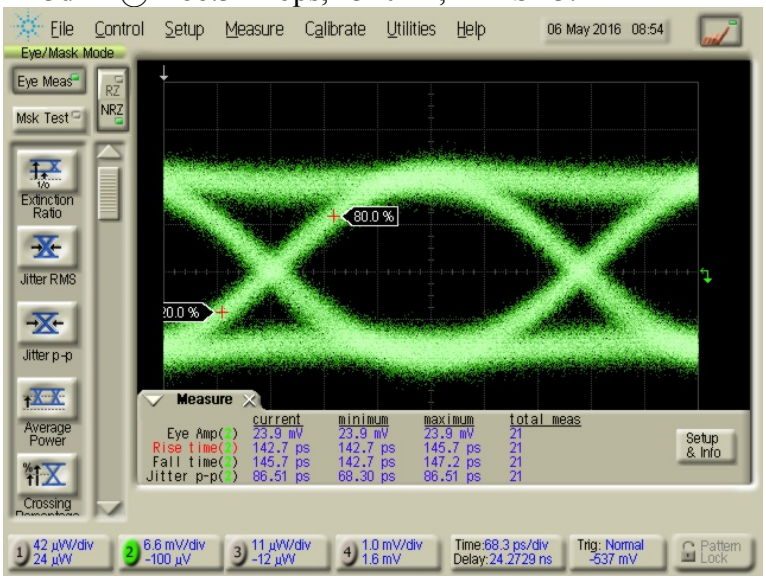
Eye Diagram:

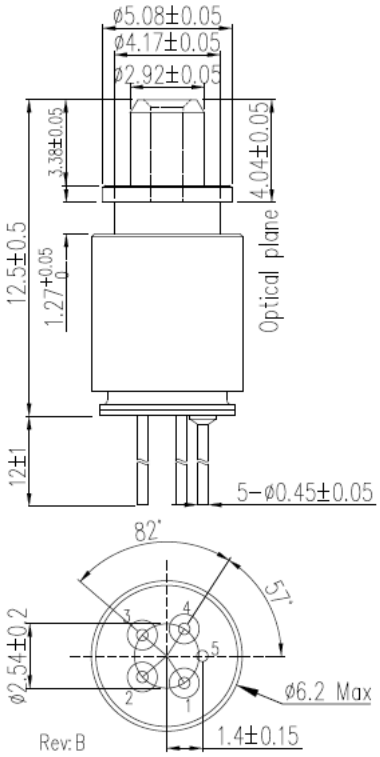
R_{load} = 50ohm, P = -23dBm@2488.32Mbps, 1310nm, PRBS 23.



tr = 142.7ps, tf = 145.7ps, Jitter p-p= 86.51ps

OUTLINE DIMENSIONS:

• Unit: mm



Pinout:

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

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