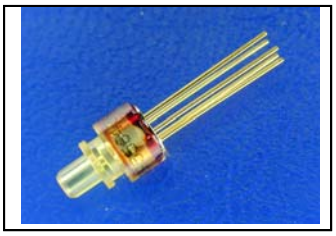
TRR-1F55-701

4.25Gbps LC Connectorized InGaAs PIN plus Pre-amplifier

FEATURES:



- Pre-aligned LC-type receptacle for optical fiber communication.
- Design for Small Form Factor transceivers.
- Suitable for long wavelength 4.25Gbps applications.
- 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	Rd		2.2		mV/μW	R_{load} = 100ohm, P = -18dBm, λ=1310nm
Single Ended Responsivity	Rs		1.1		mV/μW	R_{load} = 50ohm, P = -18dBm, λ=1310nm
Small-Signal Bandwidth	BW		2.5		GHz	P = -18dBm, λ=1310nm
Low-Frequency Cut off	LF		15		kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf			150	ps	P = -18dBm, λ=1310nm
Saturation Power	P_{Sat}	0			dBm	
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	1260		1620	nm	
Sensitivity				-22.5	dBm	λ=1310nm, @4.25Gbps , PRBS7, ER=7dB, 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

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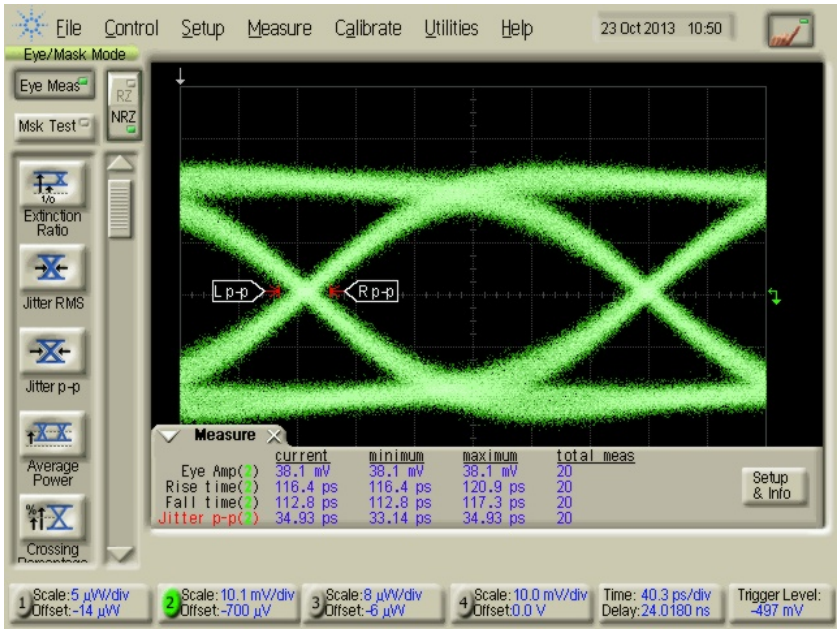
Eye Diagram:

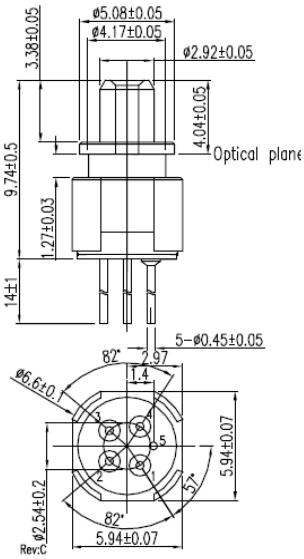
R_{load} = 50 ohm, P = -18dBm@4.25Gbps, 1310nm, PRBS 7.



tr = 116.4ps, tf = 112.8ps, Jitter p-p = 34.93ps

OUTLINE DIMENSIONS:

• Unit: mm



Pinout: D-5 (Mpd, Isource)

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

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