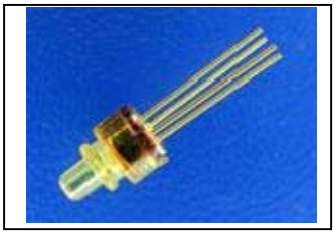
TRR-8F43-701

2.5Gbps LC Connectorized GaAs PIN plus AGC Pre-amplifier

FEATURES:



- Pre-aligned LC-type receptacle for optical fiber communication.
- Designed for Small Form Factor transceivers.
- Suitable for 2.5Gbps application.
- 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}	15	20	24	mA	no loads
Differential Responsivity	Rd		3.6		mV/μW	R_{load} = 100ohm, P = -20dBm, λ=850nm
Single Ended Responsivity	Rs		1.8		mV/μW	R_{load} = 50ohm, P = -20dBm, λ=850nm
Small-Signal Bandwidth	BW		1.5		GHz	P = -20dBm
Low-Frequency Cut off	LF		30		kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf			200	ps	P = -20dBm, λ=850nm
Saturation Power	P_{Sat}	0			dBm	
Maximum Differential Output Voltage			140	270	mV p-p	R_{load} = 100ohm, P = -15dBm, λ=850nm
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-23	dBm	λ=850nm,@2488.32Mbps, PRBS7, 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

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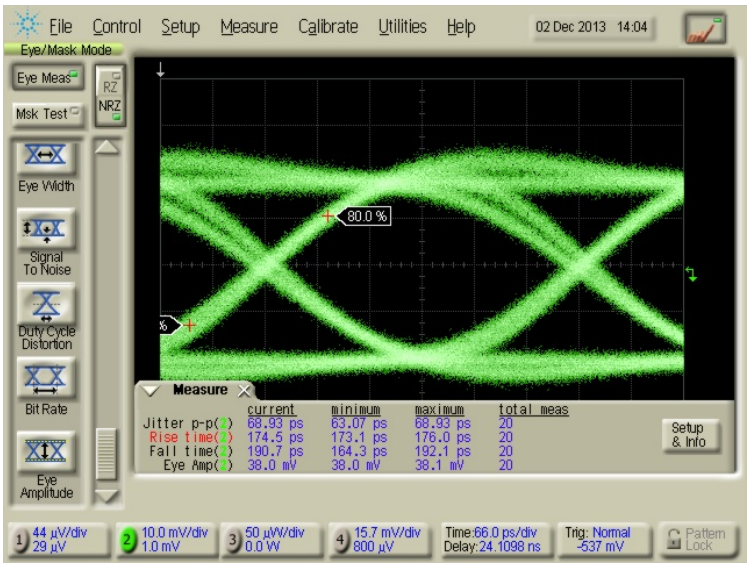
Eye Diagram：

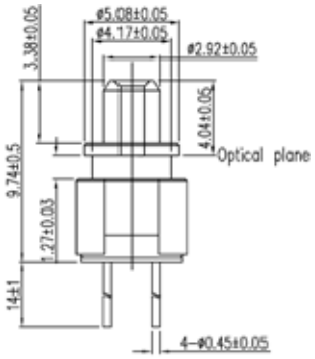
R_{load} = 50ohm, P = -20dBm@2488.32Mbps, 850nm, PRBS 7.

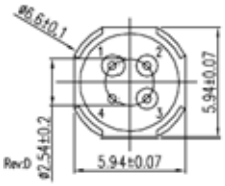


tr=174.5ps, tf=190.7ps, Jitter p-p=68.93ps

OUTLINE DIMENSIONS:

• Unit: mm





Pinout: C-4

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

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