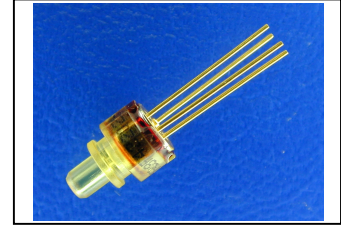


TRR-8F42-751

1.25Gbps Connectorized GaAs PIN plus AGC Pre-amplifier

FEATURES:

- Pre-aligned LC-type receptacle for multi-mode fiber communication.
- Design for Small Form Factor transceivers.
- Suitable for 1.25Gbps application.
- Single power supply +3.3 Volt.



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

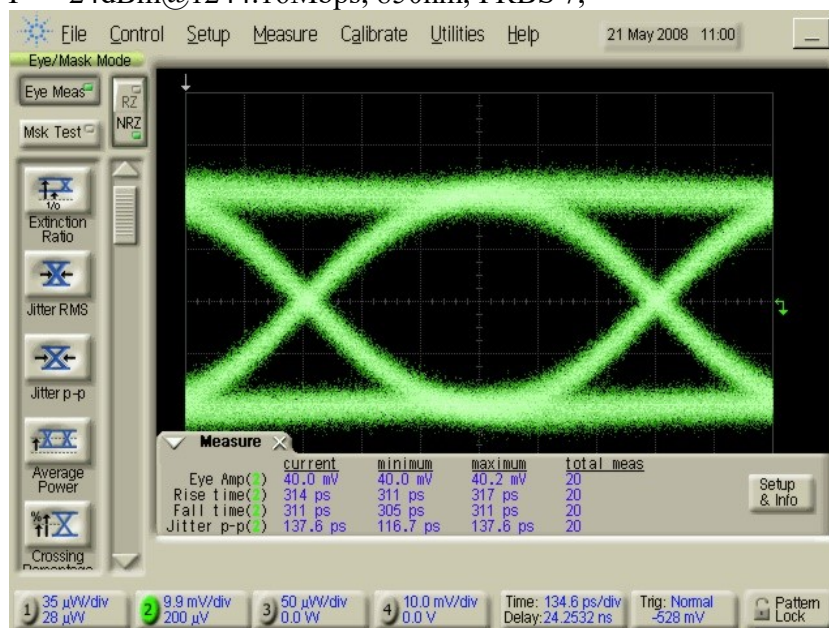
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V _{CC}	3.0	3.3	3.6	V	
Supply Current	I _{CC}		28	35	mA	no loads
Differential Responsivity	R _d	6.0	10	16	mV/μW	R _{load} =100 ohm, P = -24 dBm, λ=850 nm
Single Ended Responsivity	R _s	3.0	5	8.0	mV/μW	R _{load} =50 ohm, P = -24 dBm, λ=850nm
Small-Signal Bandwidth	BW	730			MHz	
Low-Frequency Cut off	LF			115	kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf			400	ps	P = -24 dBm, λ=850 nm
Saturation Power	P _{Sat}	0			dBm	
Single Ended Output Impedance	R _O		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-25	dBm	λ=850nm,@1244.16Mbps, 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

Eye Diagram :

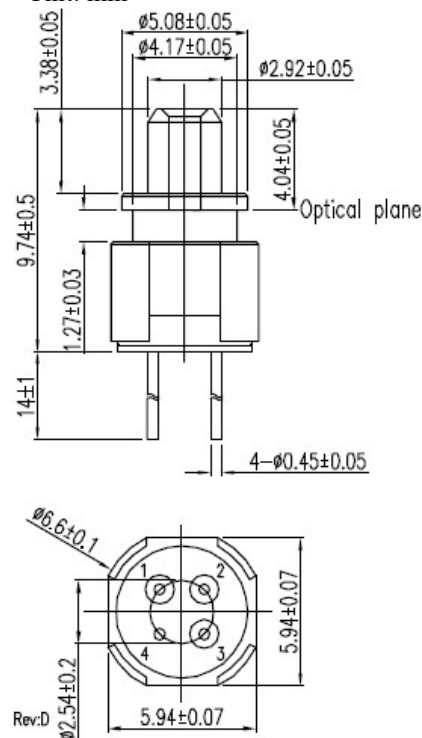
$R_{load} = 50\Omega$, $P = -24\text{dBm}@1244.16\text{Mbps}$, 850nm, PRBS 7,



$t_r=314\text{ps}$, $t_f=311\text{ps}$, Jitter p-p=137.6ps

OUTLINE DIMENSIONS:

• Unit: mm

**Pinout:**

Pin no.	Function
1	Vcc
2	Dout(—)
3	Dout(+)
4	Gnd