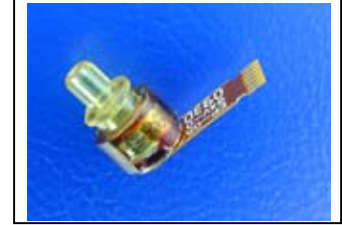


TRF-8F59-101

10Gbps LC Connectorized GaAs PIN plus Pre-amplifier with flex

FEATURES:

- LC-type optical sub-module with flexible circuit attached.
- Optimized for fiber application.
- Suitable for short wavelength 10.3125Gbps applications.
- Photocurrent monitoring available.
- Single power supply +3.3V.



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

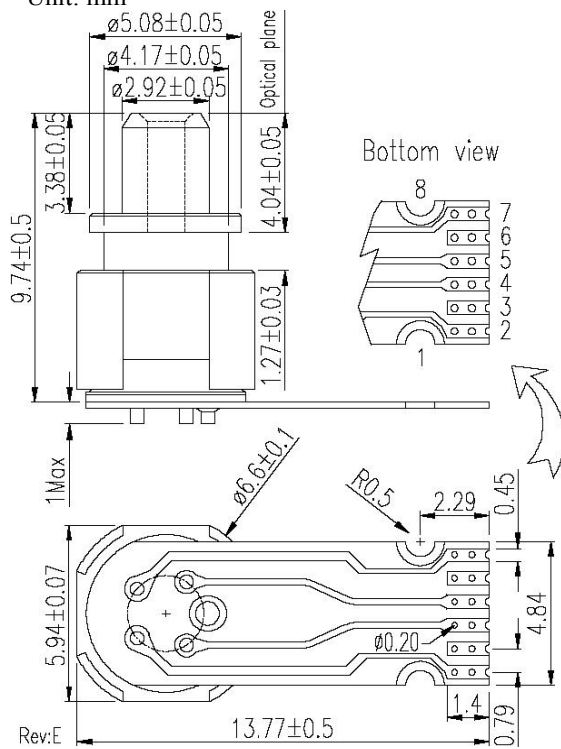
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Power Supply	V_{CC}	3.0	3.3	3.6	V	
Supply Current	I_{CC}	30	32	37	mA	no loads
Differential Responsivity	R_d	0.8	1.4	2.4	mV/ μW	$R_{load} = 100\text{ohm}$, $P = -12\text{dBm}$, $\lambda = 850\text{nm}$
Single Ended Responsivity	R_s	0.4	0.7	1.2	mV/ μW	$R_{load} = 50\text{ohm}$, $P = -12\text{dBm}$, $\lambda = 850\text{nm}$
Small-Signal Bandwidth	BW		7		GHz	
Low-Frequency Cut off	LF		0.5		kHz	
Rise / Fall Time(20 % ~ 80 %)	tr/tf		50		ps	$P = -12\text{dBm}$, $\lambda = 850\text{nm}$
Saturation Power	P_{Sat}	0			dBm	
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	770		860	nm	
Sensitivity				-14	dBm	$\lambda = 850\text{nm}$, @10.3125Gbps, PRBS31, ER=6dB, BER=1E-12

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	100	$^{\circ}\text{C}$	
Operating Temperature	-40	85	$^{\circ}\text{C}$	
Lead Solder Temperature		260	$^{\circ}\text{C}$	10 seconds
Flex Attach Temperature		370	$^{\circ}\text{C}$	10 seconds

OUTLINE DIMENSIONS:

• Unit: mm

**Pinout:**

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