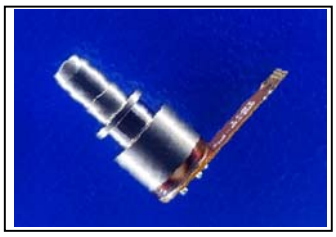
TRF-2H59-710

10Gbps LC Connectorized InGaAs APD plus Pre-amplifier with Flex

FEATURES:



- Fiber stub LC-type optical sub-module with flexible circuit attached.
- Design for Small Form Factor transceivers.
- Supports up to 10.3125Gbps application.
- 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	V_{CC}	3.0	3.3	3.6	V	
Supply Current	I_{CC}	20	27	38	mA	no loads
APDTIA Breakdown Voltage	V_{BR}	32		43	V	Id =10uA
Operating Voltage	V_{OP}		V_{BR}-3.5			Vcc = 3.3V
V_{BR} Temperature Coefficient	γ	0.02	0.03	0.04	$V°C^{-1}$	
APD Responsivity	Iapd	6.5	8.0		uA/uW	P = 10uW, λ=1550nm Vop=(V_{BR} -3.5V)
Differential Responsivity	Rd		12.0		mV/μW	R_{load} = 100ohm, P = -20dBm, λ=1550nm
Single Ended Responsivity	Rs		6.0		mV/μW	R_{load} = 50ohm, P = -20dBm, λ=1550nm
Small-Signal Bandwidth	BW		6.2		GHz	P = -20dBm
Low-Frequency Cut off	LF			30	kHz	
Saturation Power	P_{Sat}	-7			dBm	λ=1550nm @10.3125Gbps PRBS 31, ER=7dB,BER=1E-12 Vop = (V_{BR} -3.5V)
Single Ended Output Impedance	R_O		50		ohm	
Wavelength	λ	1260		1600	nm	
Optical Return Loss	ORL	27			dB	λ=1550nm
Sensitivity				-24.0	dBm	λ=1550nm @10.3125Gbps PRBS 31, ER=7dB,BER=1E-12 Vop=(V_{BR} -3.5V)
				-30.0	dBm	λ=1550nm @10.3125Gbps PRBS 31, ER=7dB,BER=1E-3 Vop=(V_{BR} -3.5V)

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	100	°C	
Operating Temperature	-40	85	°C	
Reverse current		3.6	mA	Vop = (V_{BR} -3.5V)
Lead Solder Temperature		260	°C	10 seconds
Flex Attach Temperature		370	°C	10 seconds

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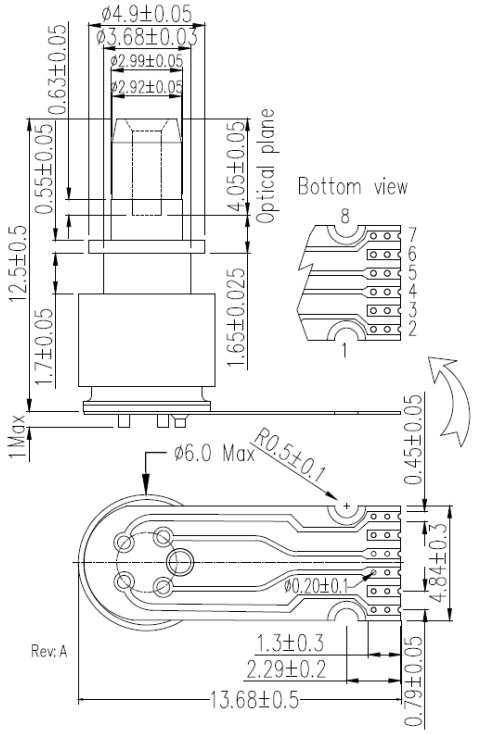
OUTLINE DIMENSIONS:

• Unit: mm



Pinout:

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

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