

1310nm 622Mbps 4-Pin PIN-TIA

DI7F-8052-x series

TYPE NAME: DI7F-8052-6

Product Description:

The LuxNet DI7F-8052-x 4-pin PIN-TIA is designed for high-speed, high-performance data communication and telecommunication applications. This PIN-TIA provides special digital diagnostic capability for transceivers with a wide dynamic range of input optical power. This device integrates our high-speed 1310 nm PIN detector with an STM4/OC12 trans-impedance amplifier (TIA), capacitors, and a TO-46 4-pin header with cap window. The product is designed for OC-12 long distance optical communication systems. The PIN-TIA assembly can be integrated with different types of ports engaged with a fiber connector to transmit the light from fiber through a receptacle into the PIN detector with high coupling efficiency.

Product Specifications:

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	-40	85	
Storage Temperature	T _{stg}	°C	-40	100	
Solder Reflow Temperature	T _s	°C		260	10 seconds max.
Power Supply Voltage	V _p	V	-0.5	4.5	
Optical Power	P _{in}	dBm		5	

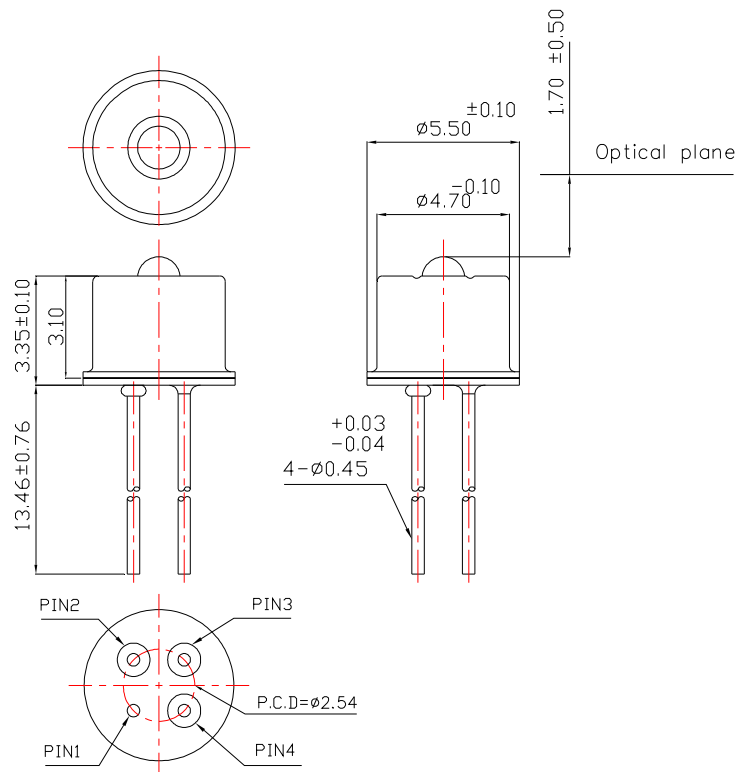
Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V _{cc}	Volts	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	23	28	35	V _{cc} = 3.3V
Sensitivity	S	dBm			-30	λ=1310nm, 2 ²³ - 1 PRBS, BER= 10 ⁻¹⁰ , ER=9-10dB
Wavelength	λ	nm	1100	1310	1650	
Rise/Fall Time	τ _r /τ _f	ps		550/550		(20%-80%)
Overload Power	P _{load}	dBm	0			λ=1310nm, 2 ²³ - 1 PRBS, BER= 10 ⁻¹⁰ , ER=9-10dB

* Specifications are subject to change without notice.
* Screening per customer-specified reject limits is available.

DI7F-8052-6 (PIN-TIA)

Dimensions: (mm)
All dimensions are nominal



PINOUT

DI7F-8052-6	
Pin Number	Function
1	Gnd
2	Vcc
3	Inverted Output(D*)
4	Non-Inverted Output (D+)

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