

1310 nm 155 Mbps 5Pin PIN-TIA

DI6F-8083-3C

TYPE NAME: DI6F-8083-3C

Product Description:

The LuxNet DI6F-8083-3C PIN-TIA is designed for high-speed, high-performance data communication and telecommunication applications. This device integrates our high-speed 1310 nm PIN detector with a STM1/OC3 trans-impedance amplifier (TIA) and capacitors into a TO-46 header with cap window. The product is designed for OC-3 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 _{stg}	°C		260	10 seconds max.
Power Supply Voltage	V _p	V		4.5	
Optical Power	P _{in}	dBm		5	

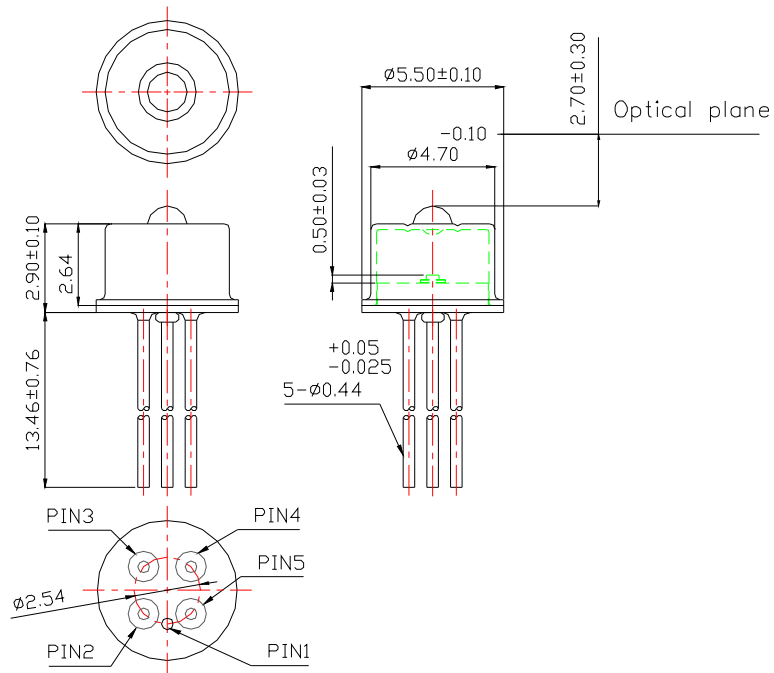
Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V _{cc}	Volts	3.0	3.3	5.0	
Supply Current	I _{cc}	mA	14	23	32	P _{in} = 0 μW, R _L = 50Ω
Output Voltage (differential)	V _{out}	mV			1.2	P _{in} = 10 μW, R _L = 50Ω
Responsivity	R	KV/W		33.1		λ=1310nm P _{in} = 7.5 μW, AC Coupled to R _L = 50Ω
Upper -3dB Bandwidth	BW	MHz		165		R _L = 50Ω
Peak Wavelength	λ _p	nm	1100	1310	1650	
Sensitivity	S	dBm		-36.5	-35	λ=1310nm 2 ²³ - 1 PRBS, BER= 10 ⁻¹⁰
Rise/Fall Time	τ _r /τ _f	ns		1.6/1.6	2.0/2.0	V _{cc} =3.3V; (20%-80%)

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

DI6F-8083-3C(PIN-TIA)

Dimensions: (mm)
All dimensions are nominal



PINOUT

DI6F-8083-3C	
Number	Function
1	GND
2	Non-inverted Output (D+)
3	Vcc
4	Current sink (I _{mon})
5	Inverted Output (D*)

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