

1310nm 1.25Gbps 5-pin PIN-TIA

DI1F-8053-Kx Series

TYPE NAME:DI1F-8053-KD

Product Description:

The LuxNet DI1F-8053-Kx is designed for high-speed, high-performance GE-PON communication applications. This device integrates our high-speed InGaAs PIN detector with a 1.25G trans-impedance amplifier (TIA) and capacitors into a TO-46 5Pin 57degree header with cap window. The PIN-TIA assembly can be integrated with a bi-directional fiber receptacle housing to receive 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	

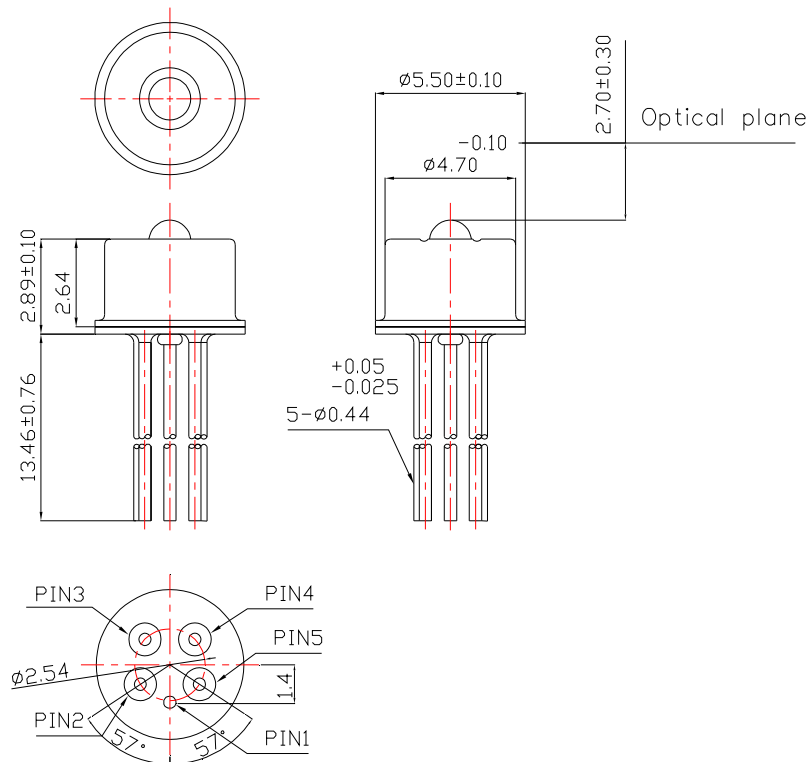
Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

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			-28	λ=1310nm 2 ⁷ -1 PRBS, BER= 10 ⁻¹⁰ , ER= 9~10dB
Wavelength	λ	nm	1100	1310	1650	
Rise/Fall Time	τ _r /τ _f	ps	200	300	400	20%-80%
Overload Power	P _{load}	dBm	0			2 ⁷ -1 PRBS, BER= 10 ⁻¹⁰ , ER= 9~10dB

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

DI1F-8053-KD (PIN-TIA)

Dimensions: (mm)
All dimensions are nominal



PINOUT

DI1F-8053-KD	
Number	Function
1	Gnd
2	Non-Inverted Output(D+)
3	Vcc
4	Current Source (RSSI)
5	Inverted Output(D*)

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Notice

Version	Date	Status	Description	Signature
1.0	2011/12/19	Initial	DI1F-8053-KD (Preliminary) Spec.	Maggie
1.1	2012/06/15	Modify	Modify Datasheet Drawing (Add header center to GND distance 1.4mm)	Maggie
1.0	2012/07/13		DI1F-8053-KD for DCC	John

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Version 1.1