4287 Technology Drive
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2.5 Gbps 850 nm PIN-TIA

Product Description:

The LuxNet MG2C-8012 PIN-TIA is designed for high-speed, high–performance data communication and telecommunication applications. This device integrates our high-speed 850 nm PIN detector with a 2.5Gbps trans-impedence amplifier (TIA) and capacitors into a TO-46 header with a lens cap window. The product is designed for 2.125Gbps to 2.5Gbps Fiber Channel, Gigabit Ethernet, and ATM/SONET transceiver modules and 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 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	0	85	
Storage Temperature	T_{stg}	°C	-40	85	
Solder Reflow Temperature	T_{stg}	°C		260	10 seconds max.
Power Supply Voltage	V_P	V		3.8	
Forward Current	I_f	mA		10	
Reverse Voltage	V_r	V		40	
Reverse Current	I_r	mA		1	

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

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Supply Voltage	V_{cc}	Volts	3	3.3		
Supply Current	I_{cc}	mA		25		P=0 μW, Rload=50 Ohm
Output Voltage (differential)	V_{out}	mV	200			P=100 μW, Rload=50 Ohm
Responsivity	R	V/W	1600			P=20 μW, Rload=50 Ohm
Upper -3dB Bandwidth	BWupper	GHz	2.0			
Peak Wavelength	λ_p	nm		850	860	
Rise/Fall Time	τ_r/τ_f	ps			150/150	V_{cc}=3.3V; 20%-80%

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

September 19, 2002

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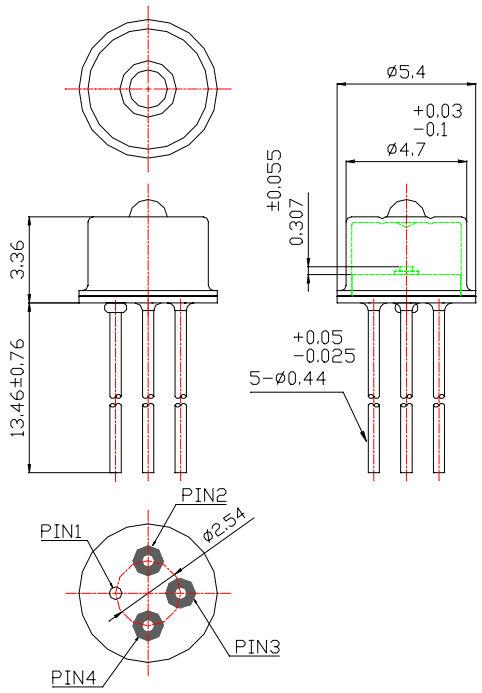
Dimensions: (mm)
All dimensions are nominal



PINOUT

MG2C-8012	
Number	Function
1	Gnd
2	Non-Inverted Output
3	Vcc
4	Inverted Output

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