



25G InGaAs Photodiode TIA ROSA-LC Package

Description

A 25 Gb/s InGaAs photodiode packaged with a transimpedance amplifier (TIA). This device is packaged in a TO-Can with LC receptacle. It comes configured with a Flex PCB. Offering flat response and a broad temperature operating range.

Features

- TO-Can Package
- LC- Receptacle
- 25 Gbps
- Wide Temperature operating range
- Received signal strength indicator
- TIA Built in
- 1K Ohm Resistance



Applications

- 5G
- RF over Fiber (RFoF)



Photodiode Electro-Optical Characteristics (T_{op} 23 ± 3°C, unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Supply Voltage	V _{cc}		3.3	3.6	V	
Supply Current	I _{cc}		26	3	mA	V _{cc} = 3.3 V
Response Spectrum	λ	1260		1600	nm	V _{cc} = 3.3 V
Bandwidth	BW		21		GHz	-3 dB bandwidth
Overload	OL	2.2			dBm	V _{cc} = 3.3 V
Sensitivity	Sen		1.1	-14	dBm	25.78 Gbps, 1310 nm, ER = 4 dB, BER = 10 ⁻⁵
Optical Return Loss	ORL			-27	dB	CW = 1310 nm
RSSI Offset Current	I _d			100	nA	V _{cc} = 3.3 V

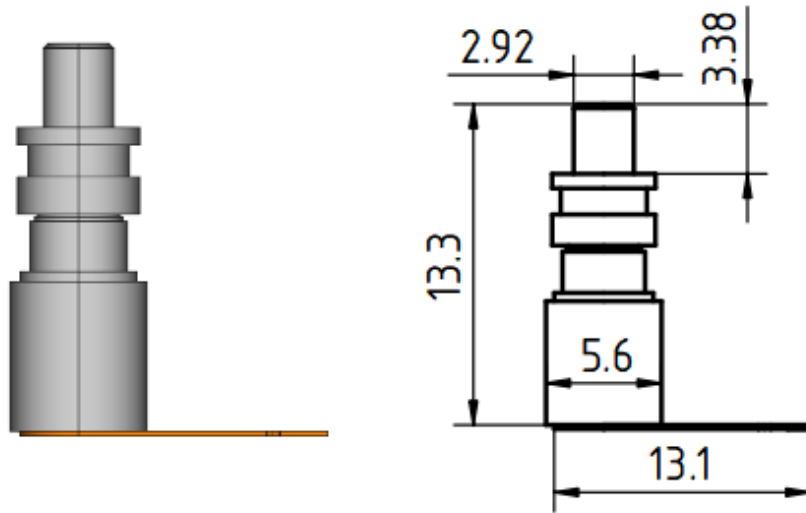
Photodiode Absolute Maximum Ratings

Parameter	Symbol	Condition	Min.	Max.	Unit
Voltage	V			3.6	V
Input Optical Power	P _{in}			5	dBm
Storage Temperature	T _{stg}		-40	90	°C
Storage Humidity	H _{stg}			85	% r.H.
Operating Temperature	T _{op}		-40	85	°C
Soldering Temperature	T _{st}	10 sec		260	°C
ESD Susceptibility		HBM	100		V

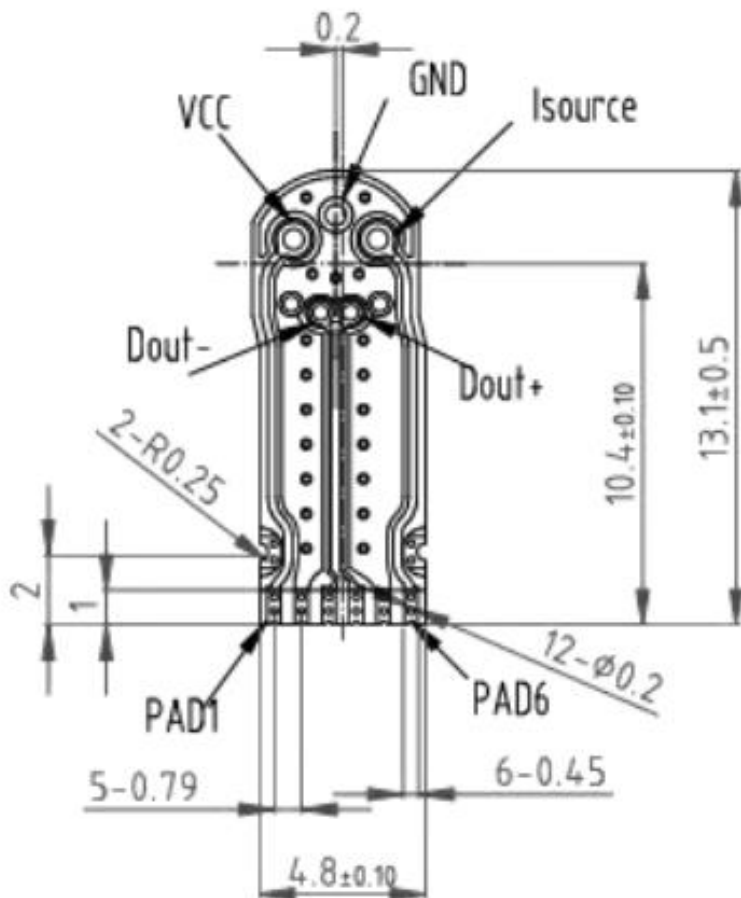
Operating at maximum operating specs for prolong periods of time will damage the device.



Device Dimensions (all units in mm)



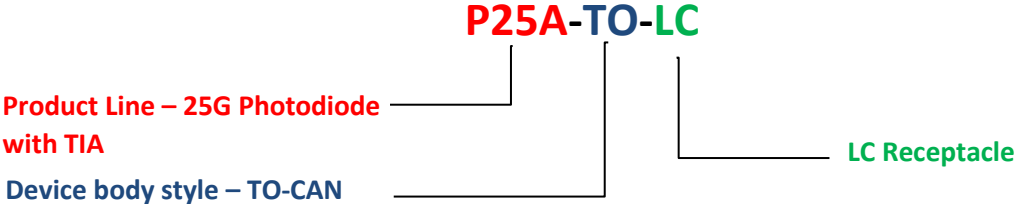
Device Pin Configuration (Bottom View)



Pad	Function
1	Vcc
2,5	GND
3	Dout (-)
4	Dout (+)
6	Isource



Device Nomenclature



Inquiry Information

Sales: All inquiries regarding sales please contact Sales@NuPhotonics.com

General: If you are interested in a custom solution, general information, or engineering related information please contact Inquiry@NuPhotonics.com



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Production Build: Customer ready devices. Small appearance changes may occur between devices.

Obsolete: Currently not supported.