



## 35G InGaAs Photodiode ROSA Package

### Description

35 GHz InGaAs photodiode built in a TO-Can package. This delivers great performance with broad temperature operating range. Offering multiple mounting bracket options as well as different optical connectors to meet your specific criteria.

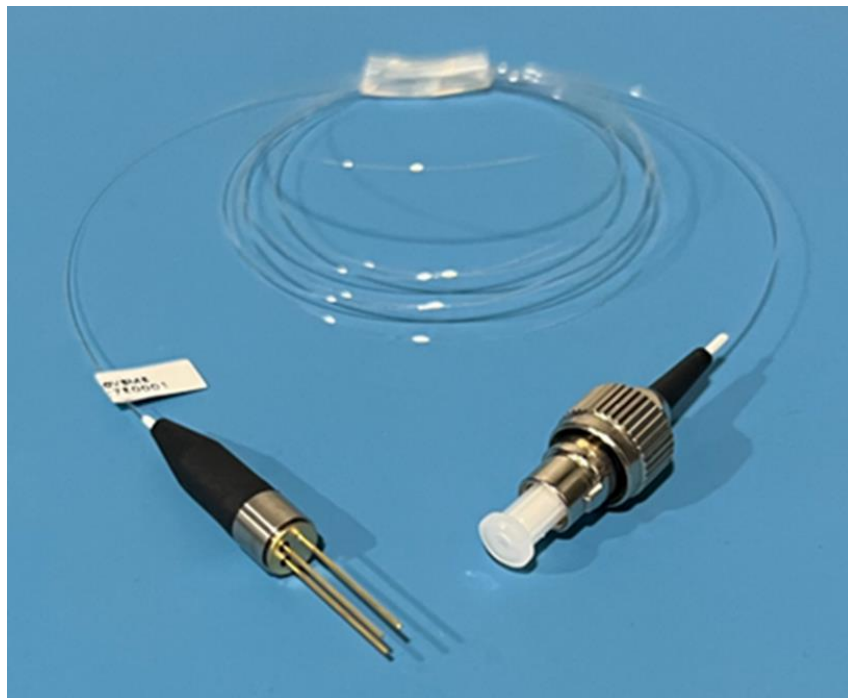
### Features

- TO-Can Package
- Single mode Pigtail cable
- Low Dark current
- High Bandwidth



### Applications

- 5G
- Datacenters
- RF over Fiber (RFoF)



### Electro-Optical Characteristics ( $T_{op} 23 \pm 3^{\circ}C$ , unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Response Spectrum	$\lambda$	1100		1650	nm	
Dark Current	$I_d$		0.05	4.0	nA	$V_r = 5.0 V$
Reverse Breakdown Voltage	$V_{BR}$	20			V	$I = 10 \mu A$
Responsivity	$R_e$	0.7			A/W	$\lambda = 1310 P_{in} 0.5 mW V = 1.0v$
Bandwidth	BW	35		50	GHz	$\lambda = 1550 P_{in} 0.5 mW V = 3.0v$ $R_L = 50\Omega$ at - 3 dB
Capacitance	$C_p$		60	70	fF	$F = 1 MHz V = 4.0 v$
Saturation power	P			10	dBm	$V_r = 5V$

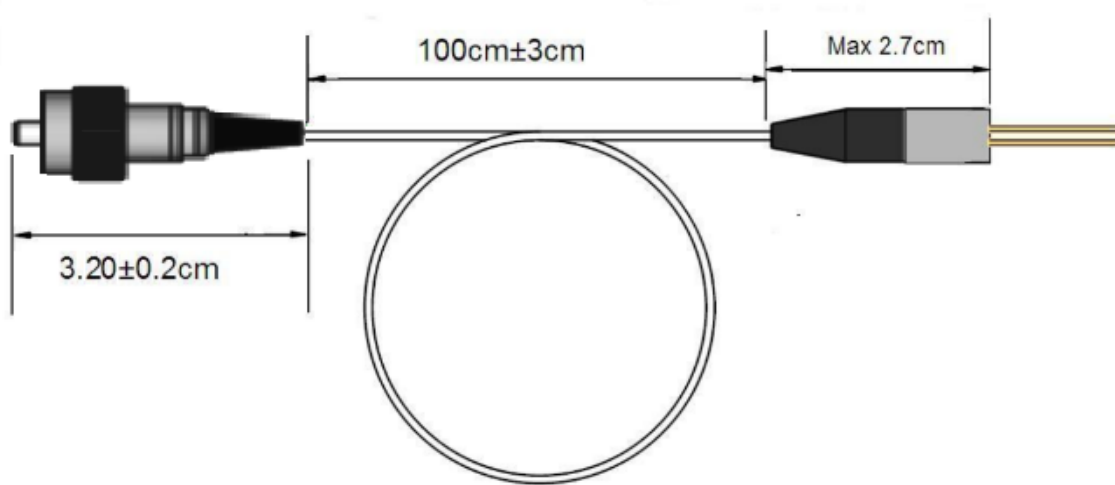
### Absolute Maximum Ratings

Parameter	Symbol	Condition	Min.	Max.	Unit
Reverse Voltage	$V_r$			10	V
Forward Current	$I_F$			10	mA
Reverse Current	$I_R$			5	mA
Optical Input power	$P_{in}$			10	mW
Storage Temperature	$T_{stg}$		-25	90	$^{\circ}C$
Storage Humidity	$H_{stg}$			85	% r.H.
Operating Temperature	$T_{op}$		-10	80	$^{\circ}C$
Soldering Temperature	$T_{st}$	60 sec		200	$^{\circ}C$
ESD Susceptibility		HBM	100		V

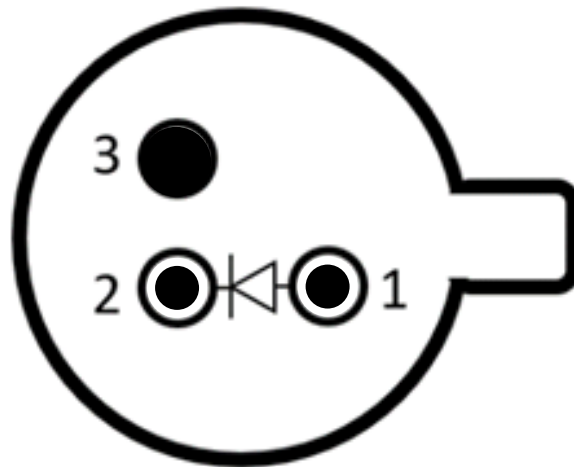
Operating at maximum operating specs for prolong periods of time will damage the device.



## Device Dimensions



## Device Pin Configuration (Bottom View)

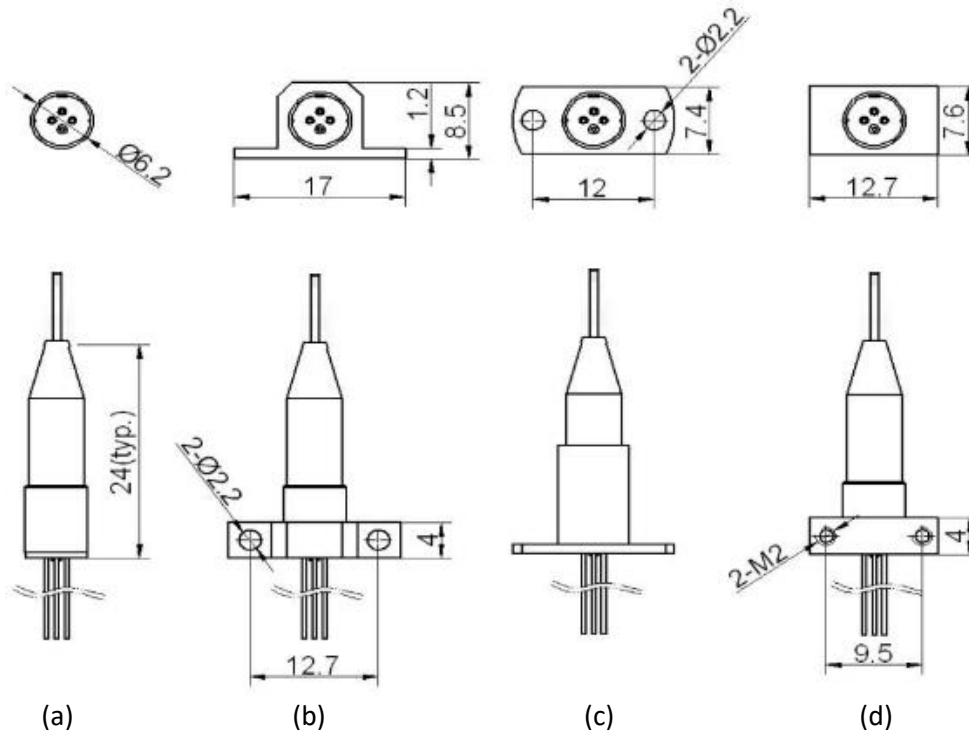


Pin Number	Function
1	PD Anode (+)
2	PD Cathode (-)
3	Case Ground

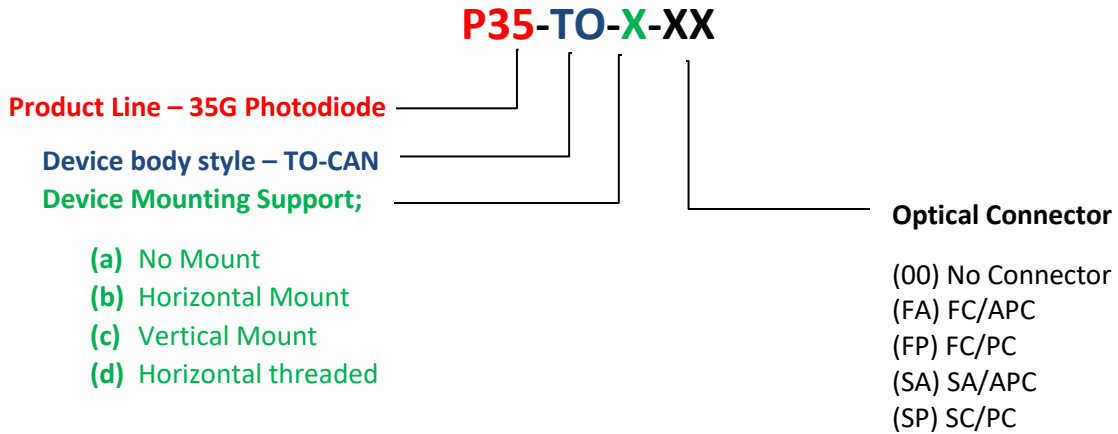
Table 1: Device Pin out



## Build Configurations – Mounting Support



## Device Nomenclature



## Inquiry Information

**Sales:** All inquiries regarding sales please contact [Sales@NuPhotonics.com](mailto:Sales@NuPhotonics.com)

**General:** If you are interested in a custom solution, general information, or engineering related information please contact [Inquiry@NuPhotonics.com](mailto:Inquiry@NuPhotonics.com)



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