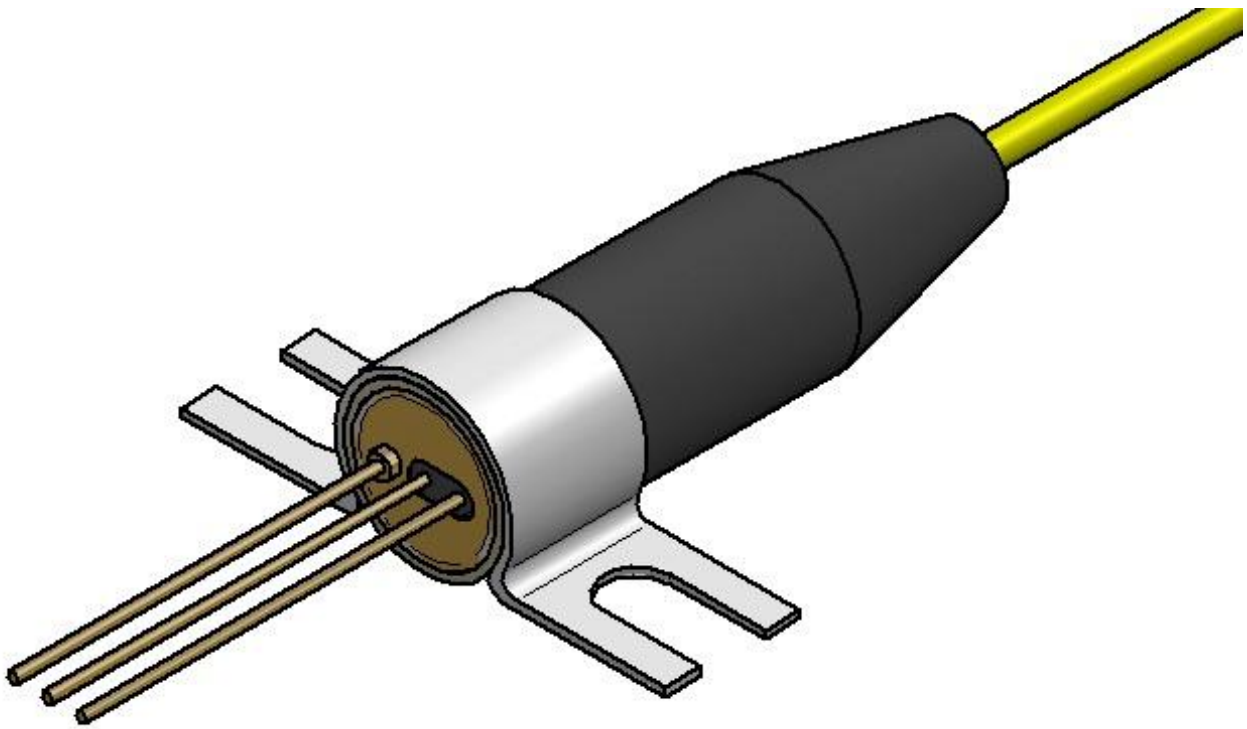


WPADP025SNSPN SPECIFICATIONS

(2.5G APD PIGTAIL)

SPECIFICATION



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General Description

This 2.5G APD module without TIA is assembled to pigtail type by high power Nd-YAG laser welding method. It has sensitive area of 55 μm diameter.

Features

- Bandwidth up to 3 GHz
- Operation at 1000 nm and 1650 nm
- Low cost coaxial type package
- Low back reflection
- 3-pin TO package
- High responsivity

Applications

- Special application such as OTDR etc, which requires high OE-conversion efficiency with a fast response time.

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Photodiode bias voltage	V_{APD}	V_{BR}	V
Forward Current	I_F	10	mA
Reverse current	I_R	2	mA
Operating case temperature range	T_C	-40 to +85	°C
Storage temperature range	T_{STG}	-40 to +85	°C

Table 1. Absolute Maximum Ratings

Electro-Optical Characteristics

Inspection sheet shall be appended to products when they are delivered. Test report shall be submitted in papers and in electronic media. It shall contain the major in following items.

Optical Characteristics (Tc=25°C)

Parameter	Symbol	Test Condition	Min	Typ.	Max	Unit
Breakdown Voltage	V_{BR}	$I_D=10\mu A$	35	45	55	V
Dark current	I_D	$V_R = 0.9V_{BR}$		5	20	nA
Cutoff frequency	f_{-3dB}	$M=10$	2	3		GHz
Total capacitance	C_{PD}	$f = 1MHz,$ $V_{PD} = 0.9V_B$		0.5	0.6	pF
Optical Wavelength Range	λ	-	1000		1650	nm
Responsivity	R	$\lambda = 1550nm, M=1$	0.7	0.8		A/W
Temperature coefficient of V_{BR}	Γ	$\Delta V_{BR}/\Delta T$	0.08	0.1	0.12	V/ °C

Table 2. Optical Characteristics

Mechanical Dimension & Pin Layout

(Unit : mm)

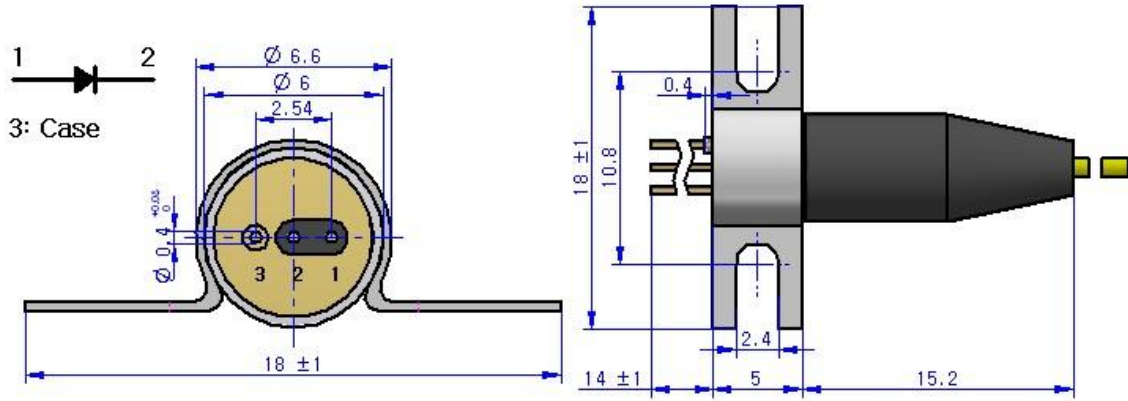


Figure 1. Mechanical Dimension

No.	Symbol	I/O	Description
1	P	-	APD Anode
2	N	-	APD Cathode
3	GND	-	Ground(Case)

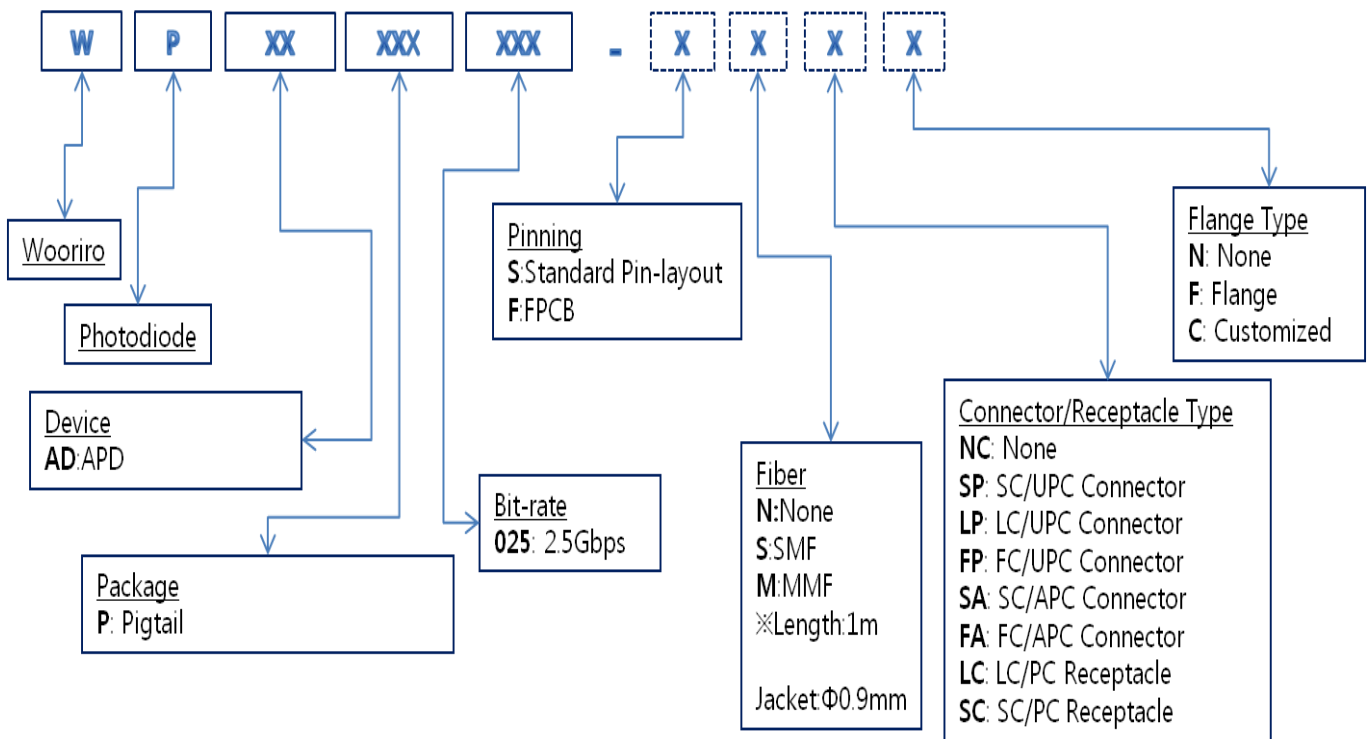
Table 3. PIN Configuration

Other Requirements

Precautions for use

This device is susceptible to damage as a result of ESD(electrostatic discharge). Use of ground straps, anti static mats, and other standard ESD protective equipment is recommended when handling or testing an InGaAs PIN/APD or any other junction photodiode. Soldering temperature of the leads should not exceed 350°C for more than 3 seconds.

ORDERING INFORMATION



Ex) WPADP025SNSPN: 2.5G APD Pigtailed standard Pin-layout with SC/UPC Connector