

P/N: R-11-075AX-P-SXX/XXX-X-XX 75um Analog InGaAs PIN Photodiode Modules-pigtailed



Features

- InGaAs/InP PIN Photodiode
- High responsivity at 1310m and 1550nm
- Low dark current
- Low intermodulation distortion
- High responsivity
- Hermetically sealed 3-pin metal case

Packaging

- SM fiber pigtailed with optional FC/ST/SC connector **Application**
- Return path Analog CATV optical receivers to 550MHz
- RoHS Compliant available

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V _R	20	V
Forward Current	١ _F	2	mA
Reverse Current	I _R	1	mA
Operating Temperature	T _{opr}	-40 ~ 85	°C
Storage Temperature	Tstg	-40 ~ 85	°C

(All optical data refer to coupled 9/125 μ m SM fiber) Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Notes
Operating Voltage	Vop	-	-	15	V	-
Detection Range		1100	1310	1650	nm	-
Responsivity	R	0.8	0.85	-	A/W	$V_{R} = 5V, \lambda = 1310$ nm
		0.9	0.95	-		$V_R = 5V, \lambda = 1550$ nm
Distortion Product:						
Composite Second Order	CSO	-	≦-70	-	dBc	Note 2
Composite Triple Beat	СТВ	-	≦-80	-		
Dark Current	I _{dark}	-	-	0.8	nA	$V_R = 5V$
Capacitance	Ct	-	0.4	0.5	pF	$V_R = 5V$
Rise / Fall Time	Tr / Tf	-	-	0.5	ns	V _R = 5V, 10%~90%
Bandwidth	BW	2	-	-	GHz	$V_R = 5V$
Optical Return Loss	ORL	40	-	-	dB	$\lambda = 1310$ nm

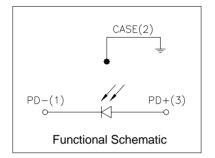
Note:

1. Specifications subject to change without notice.



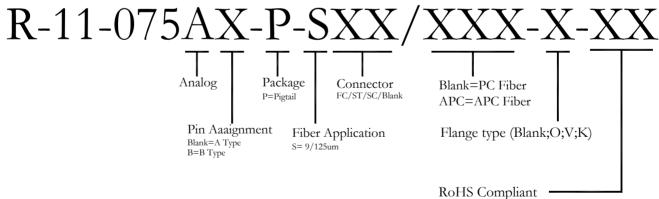
2. Test condition: 2 lasers at 1550nm with 40% OMI per channel. Total optical power is 0dBm. Distortion products measured at 80MHz, 450MHz, 600MHz, 850MHz, and 1000MHz.

PD Pin Assignment



Pin Assignment
1~PD(-)
2~CASE
3~PD(+)

Ordering Information



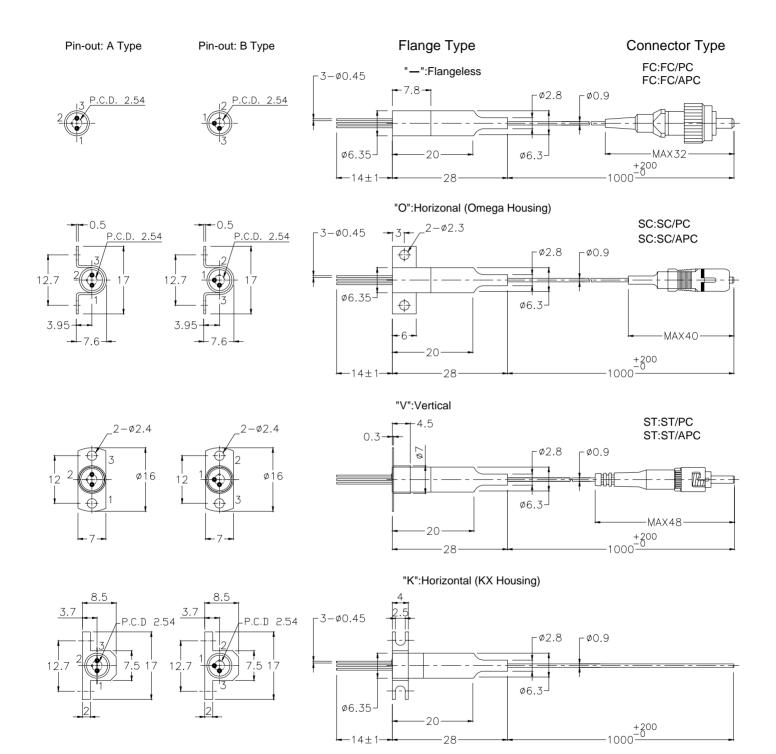
Blank/G5/GR Blank = RoHS non-compliant product G5 = RoHS 5/6-compliant product (lead exemption) GR = Full RoHS compliant product (no exemption)



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Mechanic Dimension (Units in mm)





Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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