

R-11-040AX-P-SXX/XXX-X-XX



Features

- InGaAs/InP PIN Photodiode
- High responsivity at 1310nm 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/APC connector

Application

- Return path Analog CATV Optical Receivers to 2.5GHz
- RoHS compliant available

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Value	Unit
Supply Reverse Voltage	V_R	20	V
Forward Current	I_F	2	mA
Reverse Current	I_R	1	mA
Operating Temperature	T_{opr}	-40 ~ 85	°C
Storage Temperature	T_{stg}	-40 ~ 100	°C

(All optical data refer to a coupled 9/125µm SM fiber)

Optical and Electrical Characteristics (Tc=25°C)

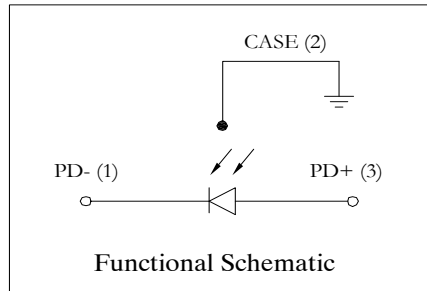
Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Operating Voltage	V_{op}	-	-	15	V	-
Detection Range		1100	1310	1650	nm	-
Responsivity	R	0.75 0.8	0.8 0.9	- -	AW	$V_R=5V, \lambda=1310nm$ $V_R=5V, \lambda=1550nm$
Linearity IMD2	IMD2	-	-70	-	dBc	Note1
Dark Current	I_{dark}	-	-	0.8	nA	$V_R=5V$
Capacitance	C	-	-	0.35	pF	Note2
Rise / Fall Time	T_r / T_f	-	-	0.125	ns	$V_R=5V, 10\% \sim 90\%$
Bandwidth	BW	8	-	-	GHz	$V_R=5V$
Optical Return Loss	ORL	40	-	-	dB	$\lambda=1310nm$

Note: 1. $V_R=12V, P_{AVG}=0dBm, MI=0.7, R_{LOAD}=50ohm, f_1+f_2=324.25MHz, f_1-f_2=54.25MHz$

2. $V_R=5V, Case grounded$

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Pin Assignment



Pin Assignment

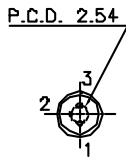
- 1~PD (-)
- 2~CASE
- 3~PD (+)

Packaging Dimension

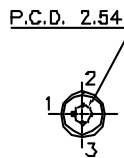
Units in mm.

Pin Assignment

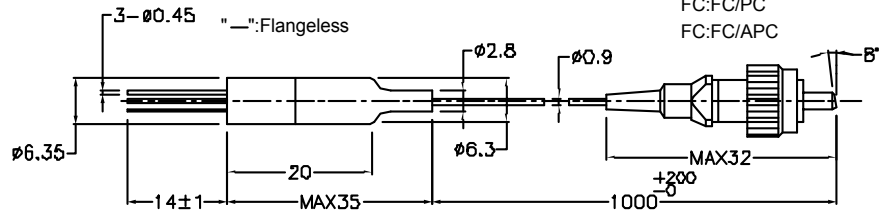
A Type



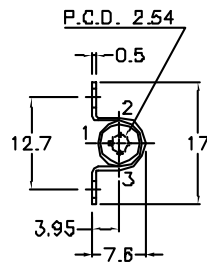
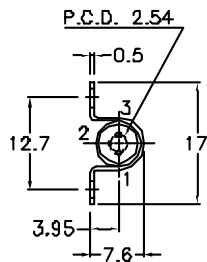
B Type



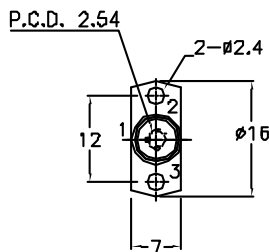
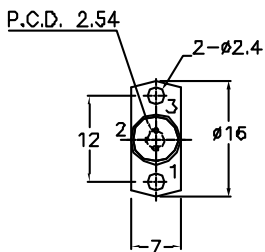
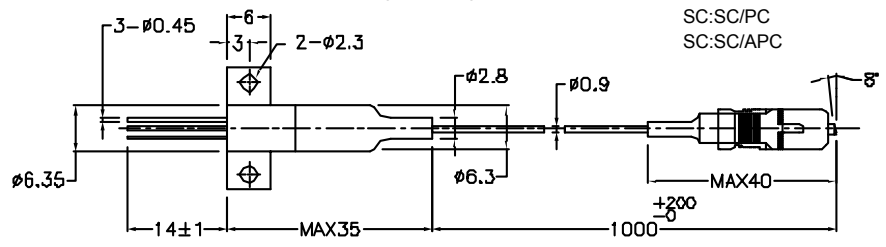
Flange Type



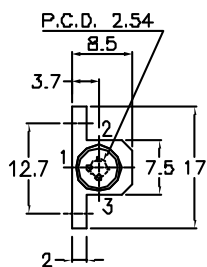
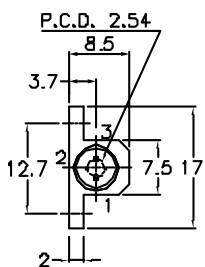
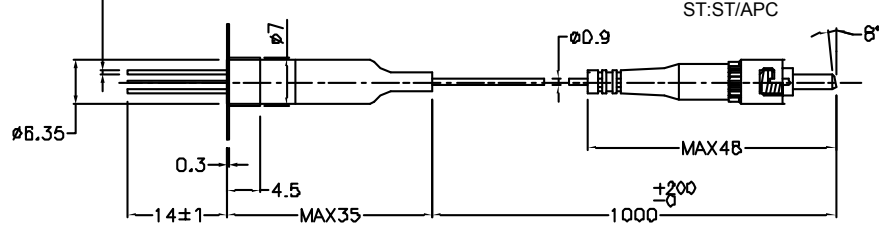
Connector Type



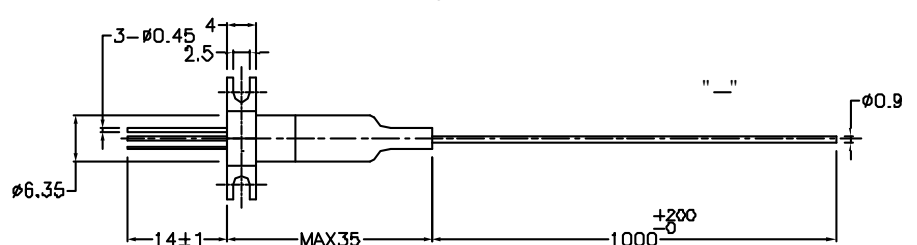
"O":Horizontal (Omega Housing)



"V":Vertical



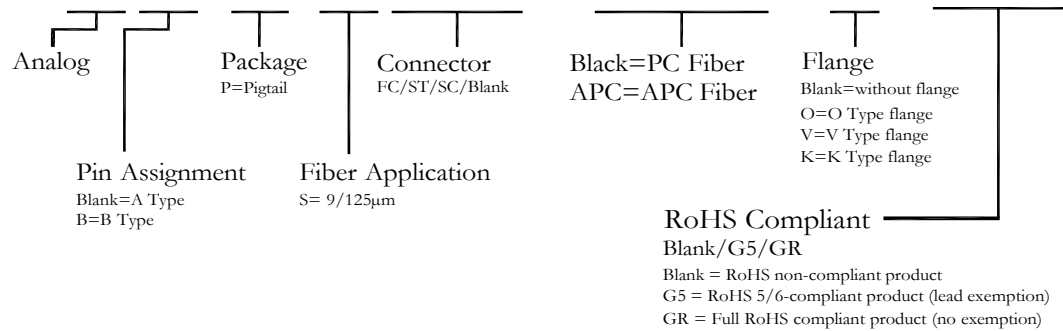
"K":Horizontal (KX Housing)



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Ordering Information

R-11-040AX-P-SXX/XXX-X-XX



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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