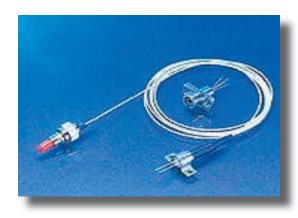
### R-11-040AX-P-SXX/XXX-X-XX



#### **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 <sub>F</sub>   | 2         | mA   |  |  |  |  |
| Reverse Current                    | I <sub>R</sub>   | 1         | mA   |  |  |  |  |
| Operating Temperature              | Topr             | -40 ~ 85  | °C   |  |  |  |  |
| Storage Temperature                | T <sub>stg</sub> | -40 ~ 100 | °C   |  |  |  |  |

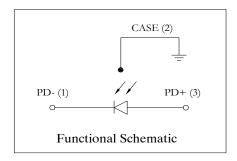
# (All optical data refer to a coupled 9/125µm SM fiber)

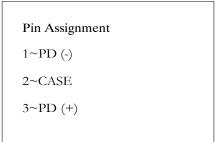
| Optical and Electrical Characteristics (Tc=25°C) |                                 |             |            |       |      |   |  |
|--|---------------------------------|-------------|------------|-------|------|---|--|
| Parameter  | Symbol                          | Min         | Тур        | Max   | Unit | Test Conditions   |  |
| Operating Voltage                                | V <sub>op</sub>                 | -           | -          | 15    | V    | -   |  |
| Detection Range                                  |                                 | 1100        | 1310       | 1650  | nm   | -   |  |
| Responsivity                                     | R                               | 0.75<br>0.8 | 0.8<br>0.9 | -     | A/W  | $V_R = 5V$ , $\lambda = 1310$ nm $V_R = 5V$ , $\lambda = 1550$ nm |  |
| Linearity IMD2                                   | IMD2                            | -           | -70        | -     | dBc  | Note1   |  |
| Dark Current                                     | I <sub>dark</sub>               | -           | -          | 0.8   | nA   | V <sub>R</sub> =5V  |  |
| Capacitance                                      | С                               | -           | -          | 0.35  | pF   | Note2   |  |
| Rise / Fall Time                                 | T <sub>r</sub> / T <sub>f</sub> | -           | -          | 0.125 | ns   | V <sub>R</sub> =5V, 10%~90%                                       |  |
| Bandwidth  | BW                              | 8           | -          | -     | GHz  | V <sub>R</sub> =5V  |  |
| Optical Return Loss                              | ORL                             | 40          | -          | -     | dB   | λ=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<sub>R</sub>=5V, Case grounded

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

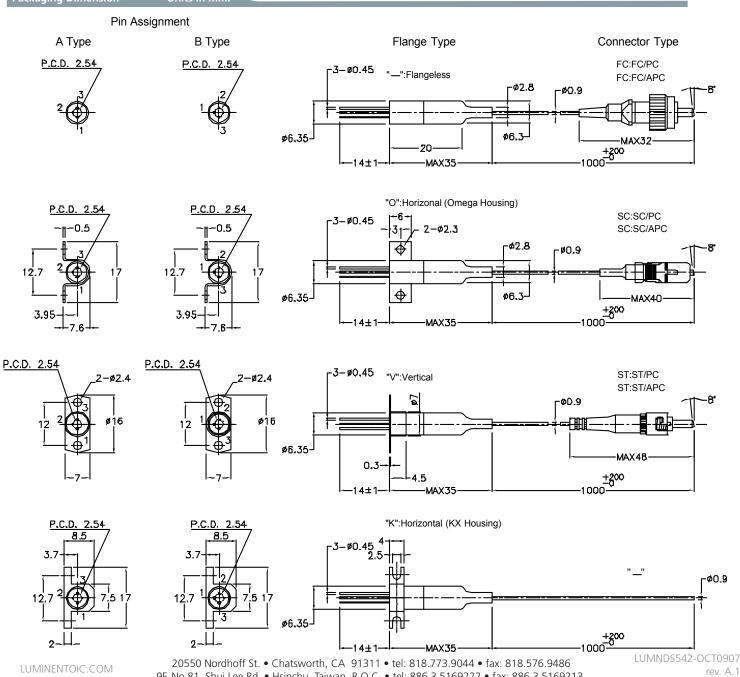
### Pin Assignment





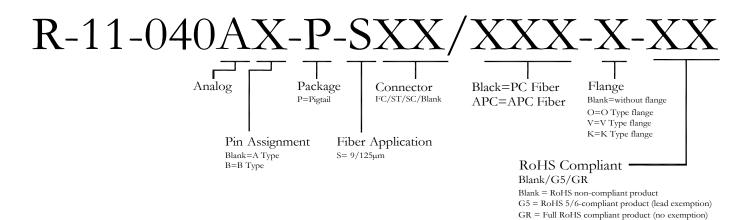
Packaging Dimension

Units in mm.



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

**Ordering Information** 



## 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.

#### **Legal Notice**

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