SANTEC OPTICAL COMPONENTS

Optical Power Monitor



Unidirectional Tap-Integrated Photo Detector IPD-UD

Santec's Unidirectional Tap-Integrated Photo Detector is an optical power monitoring device consisting of individual tap-integrated photo detectors. The IPD is very compact and is easily mounted on a PCB for system use. Optical properties are excellent and include a broad wavelength range covering C and L-band with low insertion loss and high sensitivity.

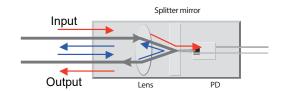
The IPD eliminated the need for an optical fiber coupler/splitter and a photo detector. The IPD provides a simple and low cost solution for optical power monitoring at DWDM and switch. Especially Santec's Unidirectional Tap-Integrated Photo Detector is useful for amplifier systems.



Features

- ▶ Excellent Characteristics
- ▶ High Directivity
- Compact Design
- Custom to Build Available
- Minimum Fiber Bending Radius of 5mm is available
- ► High Quality (GR-468-CORE Qualified)
- ▶ RoHS Compliant

Dimension



Applications

- Power and Channel Monitoring for WDM
- ▶ Power Control Monitoring for Amplifier
- \blacktriangleright Optical Monitoring for Switching Systems
- ► Supervisory for Equipment Systems

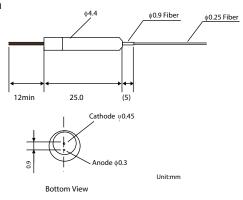


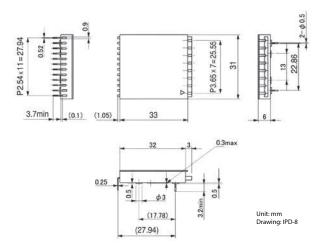
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Specifications

| Parameter | Unit | | Туре | | | | Notes |
|-----------------------------|------|------|--------------|----------|----------|-------------|-----------------------------------|
| | | | U1 | U2 | U5 | U9 | Notes |
| Insertion Loss | Max. | dB | 0.5 | 0.5 | 0.6 | 0.8 | All Operating Conditions |
| Directivity | Min. | dB | 33 | | | | - |
| Return Loss | Min. | dB | 45 | | | | - |
| PD Responsivity | - | mA/W | 8 to 20 | 14 to 24 | 40 to 70 | 70 to120 | All Operating Conditions, 5V Bias |
| Dark Current | Max. | nA | 5 | | | 70℃,5V Bias | |
| Reverse Voltage | Max. | V | 10 | | | | - |
| Forward Current | Max. | mA | 5 | | | | - |
| Wavelength Range | - | nm | 1510 to 1610 | | | | - |
| Storage Temperature Range | - | °C | -40 to 85 | | | | Non-condensation |
| Operating Temperature Range | - | °C | -5 to 70 | | | | Non-condensation |
| Input Optical Power | Max. | dBm | +23 | +20 | +16 | +13 | - |
| Fiber Length | Min. | mm | 1000+/-100 | | | | 0.25mm coating SMF |
| Dimension | - | mm | 4.4(D)x25(L) | | | | IPD-1 |
| | | | 31x32x6 | | | | IPD-8 |
| | | | 39x32x6 | | | | IPD-10 |

Dimension





Ordering Code

IPD-A-B-C-D

A=Channel

1=1ch, 8=8ch, 10=10ch

B=Type (See Specifications)

U1, U2, U3, U5, U9

C=Connector

00=No Connector

SC=SC-SPC, MU=MU-SPC, LC=LC-SPC

* For other connectors, please contact us.

D=Pin Assignment

Array Type: AC=Anode Common, CC=Cathode Common

www.santec.com/en/



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