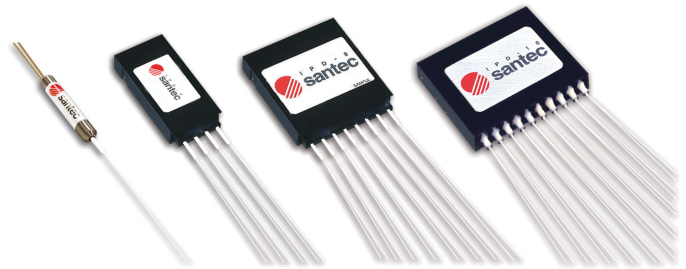


# Unidirectional Tap-Integrated Photo Detector IPD-UD

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.



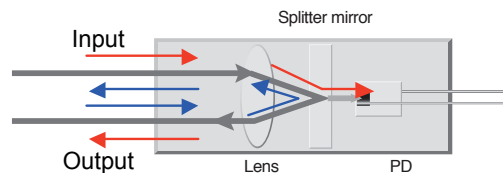
## Features

- ▶ 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

## Applications

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

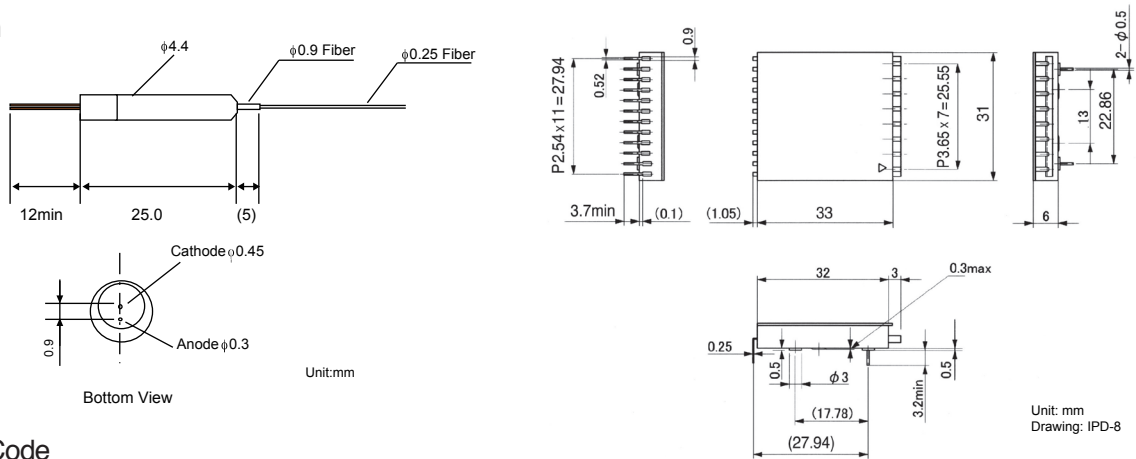
## Dimension



## Specifications

Parameter	Unit		Type					Notes
			U1	U2	U3	U5	U9	
Insertion Loss	Max.	dB	0.5	0.5	0.5	0.6	0.8	w/o connectors
Directivity	Min.	dB	25					Standard
	Min.	dB	33					High Directivity
Return Loss	Min.	dB	45					-
PD Sensitivity	-	mA/W	8 to 20	14 to 24	20 to 40	40 to 70	70 to 120	All Operating Conditions, 5V Bias
Dark Current	Max.	nA	5					70°C, 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	0 to 70					Non-condensation
Input Optical Power	Max.	dBm	+23	+20	+18	+16	+13	-
Fiber Length	Min.	mm	1000+/-100					0.25mm coating SMF
Dimension	-	mm	4.4(D)x25(L)					IPD-1, 2PIN
			17.5x32x6					IPD-4
			31x32x6					IPD-8
			39x32x6					IPD-10

## Dimension



## Ordering Code

### IPD - A - B - C - D - E

#### A=Channel

1=1ch, 4=4ch, 8=8ch, 10=10ch

#### B=Type (See Specifications)

U1, U2, U3, U5, U9

#### C=Connector

00 = No Connector

FS = FC-SPC, FA = FC-APC, SS = SC-SPC, SA = SC-APC,

MU = MU-SPC, MJ = MUJ-SPC, LC = LC-SPC

#### D=Pin Assignment

Single Type: 2P=2pinPD

Array Type: AC=Anode Common, CC=Cathode Common, SE=Pin Separate (IPD-4 Only)

#### E=Directivity Type

Standard Directivity Type: SD

High Directivity Type: HD

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