

# 1203 APD (Avalanche Photo Diode)

APD-10



## Avalanche Photodiode, 10 Gb/s with TIA

The APD-10 is a high sensitivity APD-TIA receiver in a fiber pigtail coupled package. It includes a high speed InGaAs avalanche photodiode with a high gain TIA in a hermetically sealed coaxial package. It incorporates an LC/UPC pigtail and a flexible printed circuit (FPC). The signal GND and a receptacle are electrically isolated in this APD receiver.

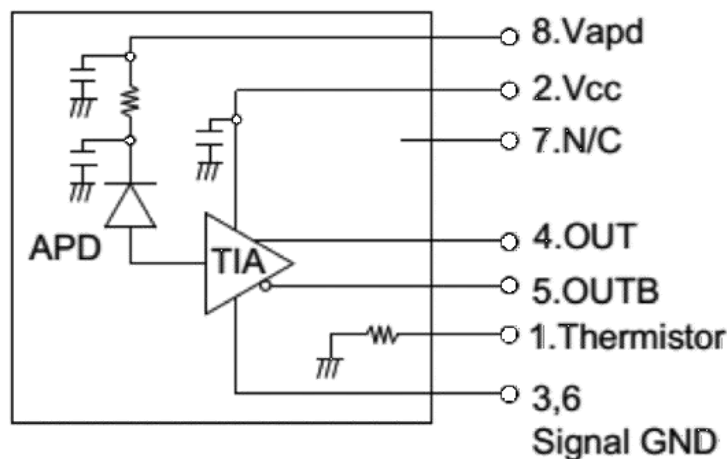
### FEATURES

- 10 Gb/s min. Gain Bandwidth
- TIA Amplifier
- High Sensitivity: -26 dBm typ.
- Low Power Consumption: 0.1 W typ.

### USE IN

- 10 GBASE-L Ethernet
- SONET°C-192
- SDH STM-64
- 10 G Fibre Channel
- Fiber Sensors

### FUNCTIONAL DIAGRAM



**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.  
**1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.**  
**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**

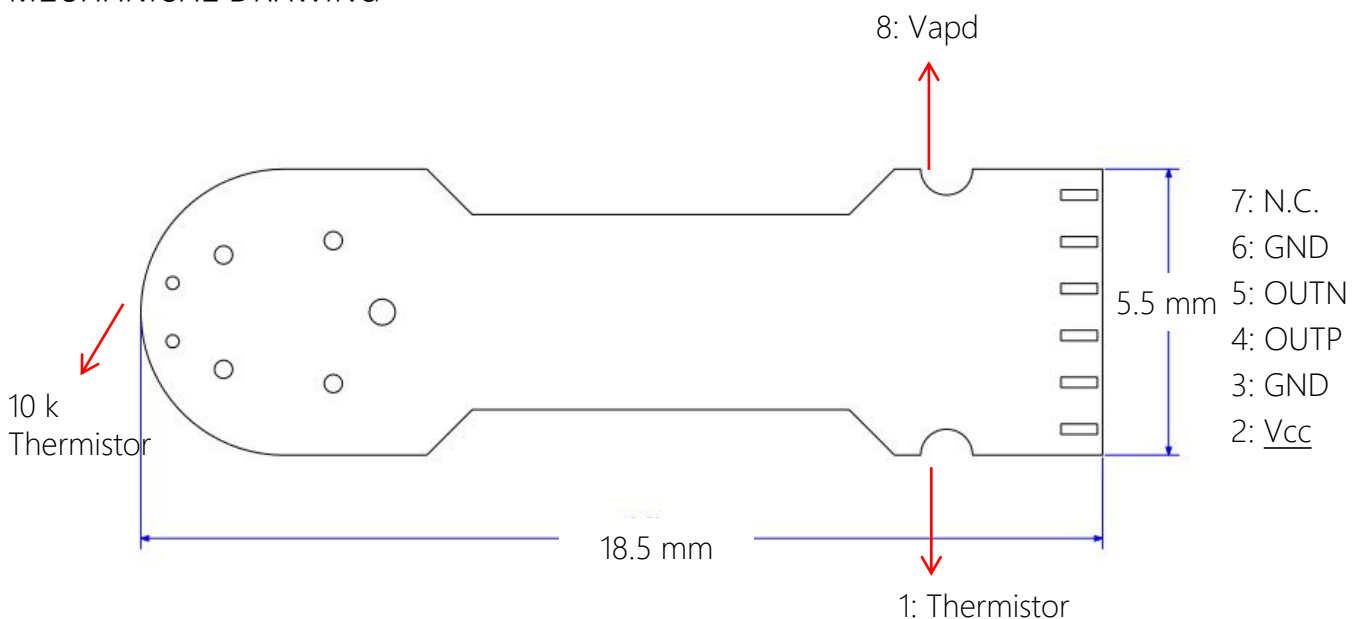
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Photodiode Wavelength Range	1300 nm to 1610 nm
Operational Bandwidth	10 GHz
Conversion Gain	Over 2000 V/W
Gain Ripple	±1.5 dB
Responsivity	1020 v/w @ 1310 nm typ.; 1080 v/w @ 1550 nm typ.; 960 v/w @ 1610 nm typ.
Min. Optical Input	- 26 dBm
S21 3 dB Bandwidth	10 GHz typ.
S22 Characteristics	12 dB from 130 MHz to 6 GHz; 7 dB from 130 MHz to 8 GHz
Optical Return Loss	27 dB min.
Output Coupling	AC Coupled
Max. Overload	-5 dBm typ.
Operating Temperature	-5 °C to +75 °C
Storage Temperature	-40 °C to +85 °C
Fiber Type	SM Fiber

## MECHANICAL DRAWING



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