### 1203 APD (Avalanche Photo Diode)

# APD-1550-BT

## BF14 Single Channel Avalanche Photo Diode (APD)

The APD-1550-BT is a BF14 single channel avalanche photo diode (APD). The APD detector series adopts high-performance APD semiconductor chip. The temperature control circuit is composed of built-in semiconductor cooler and temperature sensor in butterfly package, which ensures that the APD chip can work stably under different ambient temperatures, and greatly simplifies the power supply circuit and weak signal detection circuit of APD.

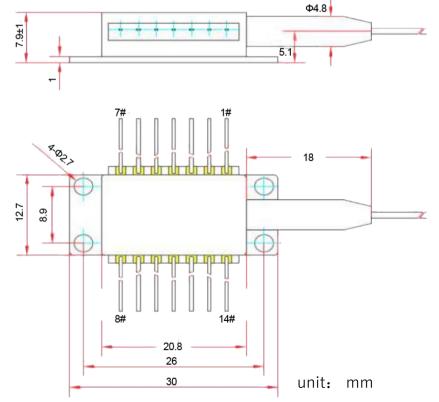
#### **FEATURES**

- Low Return Loss
- Low Dark Current
- **USE IN**
- Distributed Sensors
- Laser Radar

- Temperature Control of Butterfly Packaging
- Hermetic Packaging
- Ultra Pulse Optical Detection

#### **FUNCTIONAL DIAGRAM**

Pin#	Desc	Pin#	Desc
1	TEC+	8	NA
2	Thermistor	9	NA
3	NA	10	APD+
4	NA	11	APD-
5	Thermistor	12	NA
6	NA	13	Case
7	NA	14	TEC-



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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Output Power	10 mW or Specified	
Spectral Range	1000 nm to 1700 nm	
Detector Square	50 μm	
Responsivity	0.85 A/W min.; 1.25 A/W max.	
Max. Gain	20	
Bandwidth (-3 dB)	0.5 GHz.; 2.0 GHz typ.	
Capacitance	0.5 pF typ.	
Reverse Breakdown Voltage	40 V min.; 55 V max.	
Operating Voltage	35 V min.; 50 V max.	
Dark Current	5 nA typ.; 20 nA max.	
TEC Operating Current	1.2 A max.	
TEC Operating Voltage	4 V max.	
Fiber Type	50/125 μm	
Operating Case Temperature	-20 °C to +70 °C	
Storage Temperature	-40 °C to +85 °C	
Operating Humidity	0% to 90%	

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