



APD Butterfly Module (8 pins)

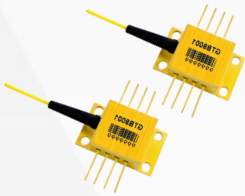
GTB9001

Features

Long Wavelength Operation
Industry-standard,Excellent Reliability
Low Dark Current,Built-in TEC, Thermistor
Hermetically Sealed 8 Pin Butterfly Package
RoHs Compliant

Application

Optical Sensor System
Optical Communications System
Test equipment
OTDR



Description: The product integrates a high linearity InGaAs APD with TEC and thermistor,low dark current, high linearity, high responsivity, M>70.

1 Absolution Maximun Ratings (Tc=25°C.unless otherwise specified)

Parameters	Symbol	Min.	Max.	Unit	Test Condition
Reverse Voltage	V_R	-	V_{BR}	V	-
Storage Temperature	Tstg	-40	+85	°C	-
Operating Temperature	Tc	-40	+85	°C	-
Soldering Temperature/Time	-	260/10		°C/S	-
Thermal Electric Cooler	-	-	3	V	Voltage
	-	-	1.2	A	Current

2 Specifications (electrical & optical characteristics)

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Wavelength Range	λ	1000	-	1650	nm	-
Temperature Coefficient of Reverse Breakdown Voltage	δ		0.2		% / °C	*1
Voltage	V_{BR}	50	-	100	V	$I_D=10\mu A$
Dark Current	I_d	-	0.3	1	nA	$V_R=V_{BR}-1V$
Responsivity	R	0.80 @1310nm			A/W	M=1
		0.95 @ 1550nm				
		0.80 @ 1650nm				
Multiplication Factor	M	40	70		M	$\lambda=1310nm,$ $I_{po}=1.0\mu A,$ $V_r=V$ (@ $I_d=1\mu A$)
Excess Noise Factor	X		0.7			$\lambda=1310nm,1550nm,$ $I_{po}=1.0\mu A,$ $M=10,f=35MHz,$ $B=1MHz$
	F		5			
Capacitance	C_t	-	0.35	-	pF	$f=1MHz,$ $V_R=V_{BR}-1V$
Multiplied Dark Current	I_{dm}		1	5	nA	M=2 to 10
Cut-off Frequency	F_c	2.5	-	-	GHz	M=10
Optical Return Loss	ORL	30	-	-	dB	SMF

*1

$$\delta = \frac{V_{BR}(25^{\circ}C + \Delta T^{\circ}C) - V_{BR}(25^{\circ}C)}{\Delta T^{\circ}C \cdot V_{BR}(25^{\circ}C)}$$



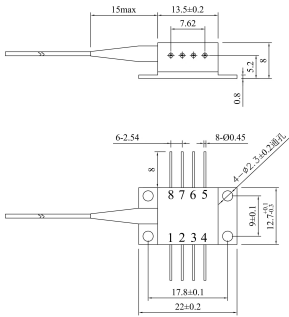


APD Butterfly Module (8 pins)

GTB9001

3 Dimensions(mm)

Pin Assignment



Pin	Description
1	TEC (+)
2	Thermistor
3	Thermistor
4	APD Anode
5	APD Cathode
6	NC
7	NC
8	TEC (-)

 Please let us know your request details before order.
* * If you have your own Pin Assignment request .
Kindly share it with us before order .



Customize for you



4 Order Information

GTB9001 series APD module

Please let us know
1: fiber type
2: connector



Part No.	Description
GTB9001	no connector
GTB90019	FC/APC ,SMF
GTB90018	FC/PC ,SMF

