

★ InGaAs Avalanche Photo Diode Module

GTA5050

Features

- Bright Surface 30μm
- Low Capacitance, Low Return Loss,Small Dark Current
- High Speed
- High Responsivity InGaAs APD

Application

- Monitoring and Meter
- Optical Instruments
- OTDR
- Sonet OC-48 / SDH STM - 16 Application

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

Parameters	Symbol	Min.	Max.	Unit	Test Condition
Reverse Voltage	V _R	-	V _{BR}	V	-
Thermoelectric Cooler Voltage	V _{TEC}	-	2.6	V	-
Thermoelectric Cooler Current	I _{TEC}	-	1.5	A	-
Operating Temperature	Top	-20	+70	℃	-
Storage Temperature	Tstg	-40	+100	℃	-
Soldering Temperature/Time	-	260/10		℃/S	-

2 Specifications (electrical & optical characteristics,Tc=25℃)

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Wavelength Range	λ	1000	-	1650	nm	-
Temperature Coefficient of Reverse Breakdown Voltage	δ		0.2		% / ℃	*1
Voltage	V _{BR}	50		100	V	I _D =10μA
Dark Current	Id	-	0.3	1	nA	V _R =V _{BR} -1V
Responsibility	R	0.85 @ 1310nm 0.90 @ 1550nm 0.88 @ 1650nm			A / W	M=1
Capacitance	Ct	-	0.35	-	pF	f = 1 MHz, V _R =V _{BR} -1V
Multiplied Dark Current	Idm		1	5	nA	M=2 to 10
Cut-off Frequency	Fc	2.5	-	-	GHz	M=10
Optical Return Loss	ORL	30	-	-	dB	SMF
Multiplication Factor	M	60	70		M	λ=1310nm, I _{po} =1.0μA, V _r =V (@I _d =1μA)
Thermistor B-Value		-	3970	-	K	25 ℃ / 85 ℃
Excess Noise Factor	X		0.7			λ=1310nm,1550nm, I _{po} =1.0μA, M=10,f=35MHz, B=1MHz
	F		5			

*1

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

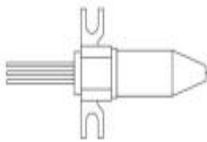
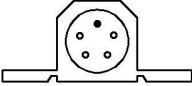
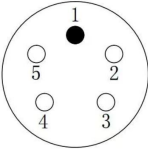


★
InGaAs Avalanche Photo Diode Module

GTA5050

3
 Dimensions(mm)

Pin Assignment

Pin	Function
1	Case
2	Thermistor
3	PD+
4	PD-
5	Thermistor

4
 Order Information

GTA5016

 InGaAs APD Module



Part No.	Description
GTA5050	InGaAs APD module ,with flange
GTA505N	InGaAs APD module ,without flange
GTA5059	InGaAs APD module ,with flange, SMF FC/APC
GTA505N9	InGaAs APD module ,without flange,SMF FC/APC
GTA5058	InGaAs APD module ,with flange, SMF FC/UPC
GTA505N8	InGaAs APD module ,without flange,SMF FC/UPC


 Please let us know your request details before order.


 Customize for you
 

