

★
InGaAs Avalanche Photo Diode Module

GTA5016

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
APD Forward Current	I _{FP}	-	10	mA	CW,25 °C
APD Reverse Current	I _R	-	0.5	mA	CW,25 °C
Relative Humidity (noncondensing)	RH	85		%	-
Operating Temperature	Top	-20	+70	°C	-
Storage Temperature	Tstg	-40	+100	°C	-
Soldering Temperature/Time	-	260/10		°C/S	-

2 **Specifications (electrical & optical characteristics,Tc=25°C)**

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 =10μA
Dark Current	I _d	-	0.25	-	nA	V _R =V _{BR} -1V
Responsibility	R	0.85 @ 1310nm			A / W	M=1
		0.90 @ 1550nm				
		0.88 @ 1650nm				
Capacitance	C _t	-	0.35	-	pF	f = 1 MHz, 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
Multiplication Factor	M	60	70		M	λ=1310nm, I _{po} =1.0μA, V _r =V (@I _d =1μA)
Excess Noise Factor	X		0.7			λ=1310nm,1550nm, I _{po} =1.0μA, M=10,f=35MHz, B=1MHz
	F		5			

*1

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

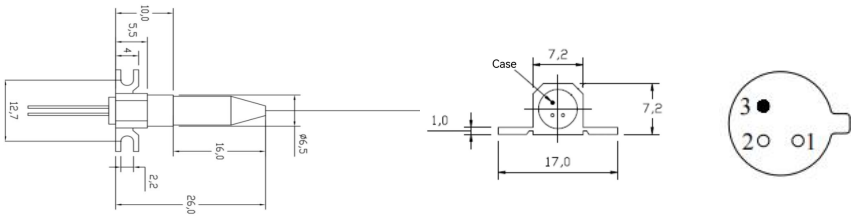


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3 Dimensions(mm)

Pin Assignment



Pin	Function
1	PD +
2	PD -
3	Case

4 Order Information

GTA5016 InGaAs APD Module



Part No.	Description
GTA5016	InGaAs APD module ,with flange
GTA5016N	InGaAs APD module ,without flange
GTA50169	InGaAs APD module ,with flange, SMF FC/APC
GTA5016N9	InGaAs APD module ,without flange,SMF FC/APC
GTA50168	InGaAs APD module ,with flange, SMF FC/UPC
GTA5016N8	InGaAs APD module ,without flange,SMF FC/UPC

 Please let us know your request details before order.

