

InGaAs Avalanche Photodiode

Specifications

Absolute Maximum Ratings

Item	Symbol	Value	Unit
Forward Current	I_F	5	mA
Reverse Current	I_R	3	mA
Operating Ambient Temperature	T_a	-40 to +85	°C
Storage Temperature	T_{stg}	-40 to +85	°C

Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions	
Active Diameter	D	-	50	-	μ m		
Bandwidth	B		3.0	-	GHz	M=10	
Responsivity	@1310nm	R	0.85	0.95	-	A/W	M=1
	@1550nm	R	0.95	1.05	-	A/W	M=1
Breakdown voltage	Vbr	38	-	55	V	$I_d=10 \mu$ A, $P_{in}=-\infty$ dBm	
Dark Current	I_d	-	-	20	nA	$0.9 \times V_{br}$	
Temperature coefficient of Vbr	Γ^*		0.13	0.14	0.15	V/°C	-45~+20°C
			0.07	0.11	0.12		+20~+85°C
Chip Capacitance	C_{chip}	-	-	0.50	pF	f=1MHz	
Total Capacitance	C	-	-	0.80	pF	f=1MHz	

* $\Gamma = \Delta V_{br} / \Delta T$

KYOTO SEMICONDUCTOR Co., Ltd.

Specifications are subject to change without notice.

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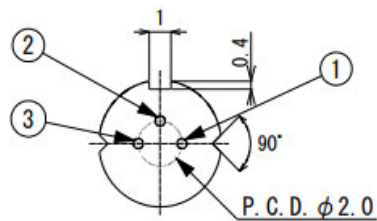
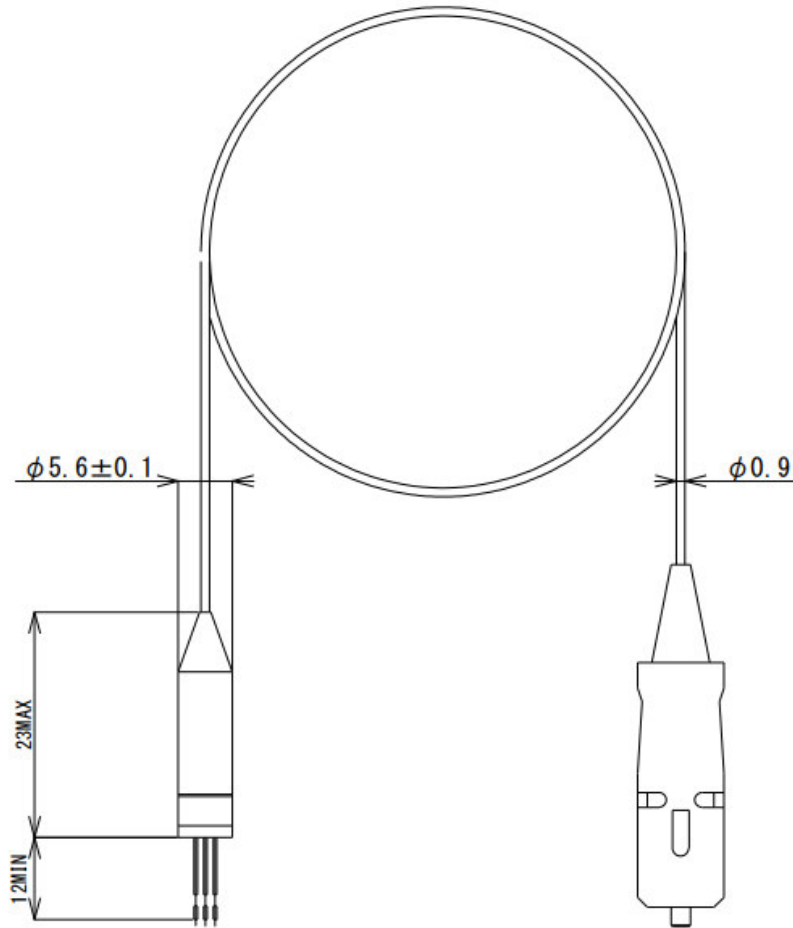
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Drawings (Unit : mm)



Bottom View

Pin Assignment

- ① anode
- ② case
- ③ cathode

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