

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 | |

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

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Specifications are subject to change without notice.

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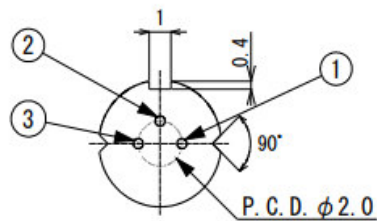
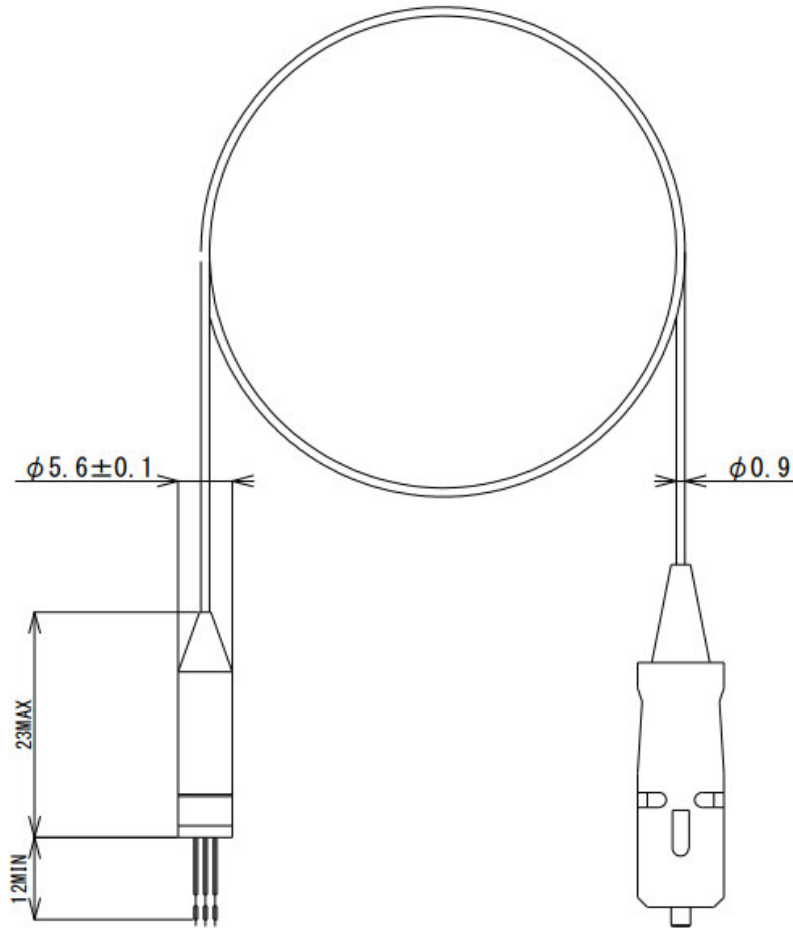
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Drawings (Unit : mm)



Bottom View

Pin Assignment

- ① anode
- ② case
- ③ cathode

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