

L610/PD010-35D52

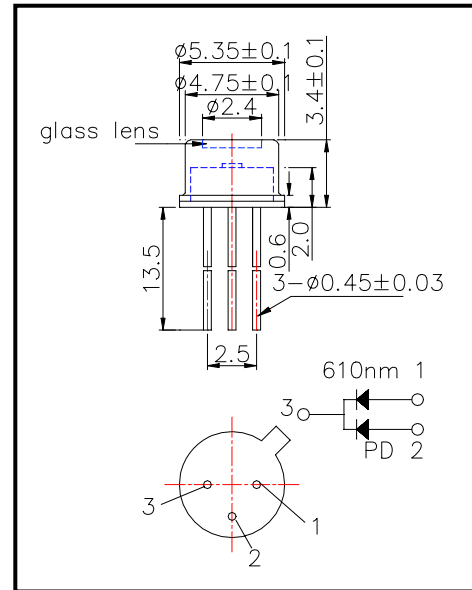
Metal can sealed PD monitoring high power LED

L610/PD010-35D52 consists of a InGaAsP LED 610nm and a Si-PD mounted on TO-18 stem hermetically sealed with a glass flat can, and is designed to monitor reflected light through detector for controlling its own output power

◆ Specifications

- | | |
|---------------------|--------------------------|
| 1) Product Name | LED Lamp with PD Monitor |
| 2) Type No. | L610/PD010-35D52 |
| 3) Chip | |
| (1) Chip material | InGaAsP and Si(PIN) |
| (2) Peak wavelength | 610nm |
| 4) Package | |
| (1) Stem | Φ5mm TO-18 |
| (2) Lens | Metal Can (Gold Plate) |

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings [Ta=25°C]

| Device | Item | Symbol | Maximum Rated | Unit |
|--------|-----------------------|--------|---------------|------|
| LED | Power Dissipation | PD | 110 | mW |
| LED | Forward Current | IF | 50 | mA |
| LED | Pulse Forward Current | IFP | 300 | A |
| LED | Reverse Voltage | VR | 5 | V |
| PD | Reverse Voltage | VR | 100 | V |
| | Operating Temperature | TOPR | -20 ~ +85 | °C |
| | Storage Temperature | TSTG | -30 ~ +95 | °C |
| | Soldering Temperature | TSOL | 260 | °C |

‡Soldering condition: Soldering condition must be completed within 3 seconds at 250°C

◆ Electro-Optical Characteristics [Ta=25°C]

| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
|----------------------|--------|-----------|---------|---------|---------|-------|
| Forward Voltage | VF | IF=20mA | | 2.0 | 2.3 | V |
| Reverse Current | IR | VR=5V | | | 10 | uA |
| Total Radiated Power | PO | IF=20mA | | 0.8 | | mW |
| Radiant Intensity | IE | IF=20mA | | 8 | | mW/sr |
| Peak Wavelength | λP | IF=20mA | 600 | 610 | 620 | nm |
| Half Width | Δλ | IF=20mA | | 15 | | nm |
| Viewing Half Angle | θ 1/2 | IF=20mA | | ±55 | | deg. |
| Rise Time | tr | IF=20mA | | 100 | | ns |
| Fall Time | tf | IF=20mA | | 100 | | ns |
| Output Current | IL | VR=0V | | 65 | | uA |
| Dark Current | ID | VR=10V | | | 10 | nA |

‡Total Radiated Power is measured by Photodyne #500