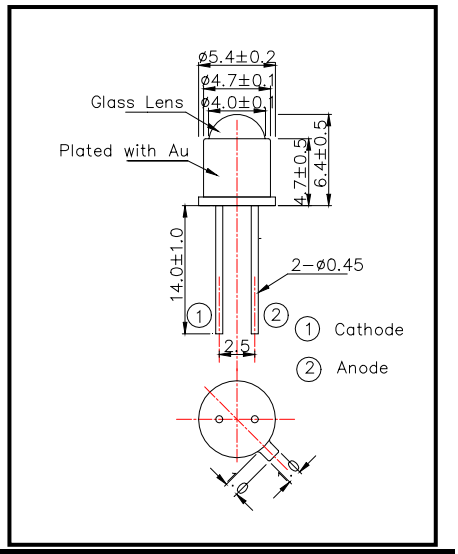
# L1050-35M32

Stem type LED with high output power

L1050-35M32 is an InGaAsP LED mounted on a TO-18 stem
with a spherical glass lens being designed for high output power uses.
On forward bias, it emits a spectral band of radiation, which peaks at 1050nm.

♦Outer dimension(Unit: mm)




♦Features

1) High radiated intensity
2) High Reliability

♦Specifications

| | |
|---|---|
| 1) Product Name | NIR LED Lamp |
| 2) Type No. | L1050-35M32 |
| 3) Chip Spec. | |
| (1) Material | InGaAs/InP |
| (2) Peak Wavelength | 1050nm |
| 4) Package | |
| (1) Type | TO-18 stem |
| (2) Lens | Spherical glass lens |
| (3) Cap | Gold plated |

♦Absolute Maximum Ratings

| Item | Symbol | Maximum Rated Value | Unit | Ambient Temperature |
|---|---|---|---|---|
| Power Dissipation | $P_D$ | 140 | mW | Ta=25°C |
| Forward Current | $I_F$ | 100 | mA | Ta=25°C |
| Pulse Forward Current | $I_{FP}$ | 1000 | mA | Ta=25°C |
| Reverse Voltage | $V_R$ | 3 | V | Ta=25°C |
| Operating Temperature | $T_{OPR}$ | -20 ~ +90 | °C | |
| Storage Temperature | $T_{STG}$ | -30 ~ +100 | °C | |
| Soldering Temperature | $T_{SOL}$ | 260 | °C | |

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.
‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

♦Electro-Optical Characteristics

| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$=50mA | | 1.2 | 1.3 | V |
| Reverse Current | $I_R$ | $V_R$=5V | | | 10 | uA |
| Total Radiated Power | $P_O$ | $I_F$=50mA | 0.6 | 1.5 | | mW |
| Radiant Intensity | $I_E$ | $I_F$=50mA | | 1.5 | | mW/sr |
| Peak Wavelength | $\lambda_P$ | $I_F$=50mA | 1000 | 1050 | 1100 | nm |
| Half Width | $\Delta\lambda$ | $I_F$=50mA | | 100 | | nm |
| Viewing Half Angle | $\theta_{1/2}$ | $I_F$=50mA | | ±15 | | deg. |
| Rise Time | tr | $I_F$=50mA | | 10 | | ns |
| Fall Time | tf | $I_F$=50mA | | 10 | | ns |

**‡Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2742**

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