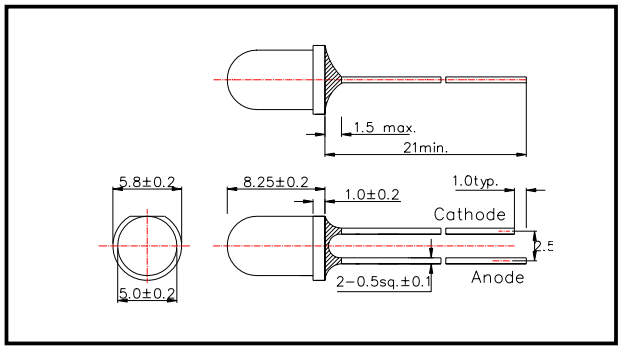
# LED750-03AU Infrared LED Lamp

LED750-03AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens.
On forward bias, it emits a spectral band of radiation, which peaks at 750 nm.

Specifications

| | |
|---|---|
| 1) Product Name | Infrared LED Lamp |
| 2) Type No. | LED750-03AU |
| 3) Chip | |
| (1) Chip Material | AlGaAs |
| (2) Peak Wavelength | 750 nm typ. |
| 4) Package | |
| (1) Type | 5 mm clear molding |
| (2) Resin Material | Epoxy Resin |
| (3) Lead Frame | Soldered |

Outer dimension (Unit: mm)




Absolute Maximum Ratings

| Item | Symbol | Maximum Rated Value | Unit | Ambient Temperature |
|---|---|---|---|---|
| Power Dissipation | $P_D$ | 200 | mW | Ta = 25°C |
| Forward Current | $I_F$ | 100 | mA | Ta = 25°C |
| Reverse Voltage | $V_R$ | 5 | V | Ta = 25°C |
| Operating Temperature | $T_{OPR}$ | -30 ~ +85 | °C | |
| Storage Temperature | $T_{STG}$ | -30 ~ +100 | °C | |
| Soldering Temperature | $T_{SOL}$ | 260 | °C | |
| Pulse Forward Current | $I_{FP}$ | 500 | mA | Ta = 25°C |

‡Pulse Forward Current condition: Duty=1% and Pulse Width = 10 µs.
‡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 | $V_F$ | $I_F$ = 50 mA | | 1.85 | 2.00 | V |
| Reverse Current | $I_R$ | $V_R$ = 5 V | | | 10 | uA |
| Total Radiated Power | $P_O$ | $I_F$ = 50 mA | 13.0 | 18.0 | | mW |
| Radiant Intensity | $I_E$ | $I_F$ = 50 mA | 35 | 70 | | mW/sr |
| Peak Wavelength | $\lambda_P$ | $I_F$ = 50 mA | 730 | 750 | 770 | nm |
| Half Width | $\Delta\lambda$ | $I_F$ = 50 mA | | 30 | | nm |
| Viewing Half Angle | $\theta_{1/2}$ | $I_F$ = 50 mA | | ±15 | | deg. |
| Rise Time | tr | $I_F$ = 50 mA | | 80 | | ns |
| Fall Time | tf | $I_F$ = 50 mA | | 80 | | ns |

‡Pulse Forward Current condition: Duty = 1% and Pulse Width = 10 µs.
‡Total Radiated Power is measured by Photodyne #500
‡Radiant Intensity is measured by Tektronix J-6512

ROITHNER LASERTECHNIK, 1040 Vienna, Austria, Schoenbrunner Str. 7
Tel: +43 1 586 52 43-0, Fax: +43 1 586 52 43-44
office@roithner-laser.com, www.roithner-laser.com