

L940-40 _ _ _ High Power Metal Stem LED Lamp

The series of L940-40 _ _ _ is a GaAs LED mounted on a metal stem and covered with epoxy resin or hermetically sealed with $\Phi 5$ glass-lens can.

On forward bias it emits a high power radiation, which peaks at 940nm.

◆ Absolute Maximum Ratings

| Item | Symbol | Maximum Rated Value | Unit | Ambient Temperature |
|-----------------------|--------|---------------------|------|---------------------|
| Power Dissipation | PD | 14 | mW | Ta=25°C |
| Forward Current | IF | 100 | mA | Ta=25°C |
| Pulse Forward Current | IFP | 1000 | mA | Ta=25°C |
| Reverse Voltage | VR | 5 | V | Ta=25°C |
| Operating Temperature | TOPR | -30 ~ +90 | °C | Ta=25°C |
| Storage Temperature | TSTG | -30 ~ +100 | °C | |
| Soldering Temperature | TSOL | 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 [Ta=25°C]

| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
|-----------------|-----------------|-----------|---------|---------|---------|------|
| Forward Voltage | VF | IF=50mA | | 1.30 | 1.40 | V |
| Reverse Current | IR | VR=5V | | | 10 | uA |
| Peak Wavelength | λP | IF=50mA | 925 | 940 | 955 | nm |
| Half Width | $\Delta\lambda$ | IF=50mA | | 50 | | nm |
| Rise Time | tr | IF=50mA | | 1000 | | ns |
| Fall Time | tf | IF=50mA | | 500 | | ns |

◆ Total Radiant Power and Radiant Intensity at IF=50mA [Ta=25°C]

| Type No. | Total Radiant Power unit:mW | | | Radiant Intensity unit:mW/sr | | | Viewing Half Angle |
|------------|-----------------------------|---------|---------|------------------------------|---------|---------|--------------------|
| | Minimum | Typical | Maximum | Minimum | Typical | Maximum | |
| L940-40K00 | 10 | 15 | | | 3 | | $\pm 40^\circ$ |
| L940-40K42 | 5 | 9 | | | 45 | | $\pm 6^\circ$ |
| L940-40M00 | 11 | 18 | | | 10 | | $\pm 40^\circ$ |
| L940-40M32 | 8 | 13 | | | 40 | | $\pm 10^\circ$ |
| L940-40T52 | 3.5 | 6 | | | 3 | | $\pm 55^\circ$ |

‡Radiant Intensity is measured by Tektronix J6512

‡Total Radiated Power is measured by Photodyne #500.

◆ Outer dimension (Unit: mm)

