

L940-40D42

Stem Type LED with High Beam

L940-40D42 is an GaAs LED mounted on a TO-18 stem and hermerically sealed with unspherical glass lens.

On forward bias, it emits a spectral band of radiation which peaks at 940nm.

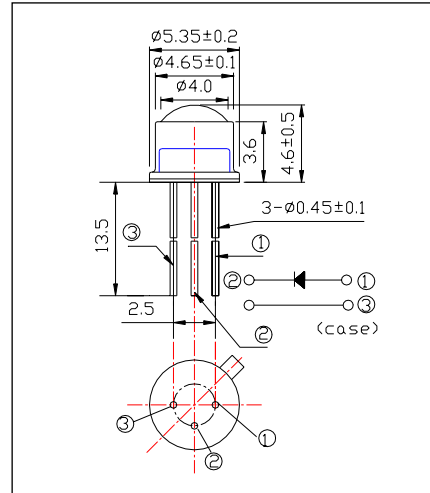
<Features>

- High Beam
- High Reliability
- 400 micron sq. die

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L940-40D42
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 940nm
4. Package
 - Type: TO-18 Stem
 - Lens: Unspherical Glass Lens
 - Cap: Gold Plated

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	140	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 ~ +80	°C	
Storage Temperature	TSTG	-30 ~ +100	°C	
Soldering Temperature**	TSOL	260	°C	

* Duty=1% and Pulse Width=10µs.

** Soldering condition must be completed within 3 second at 260 °C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.30	1.45	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA		9		mW
Radiant Intensity**	IE	IF=50mA		45		mW/sr
Peak Wavelength	λP	IF=50mA		940		nm
Half Width	Δλ	IF=50mA		50		nm
Viewing Half Angle	θ1/2	IF=50mA		±6		deg
Rise Time	tr	IF=50mA		1000		ns
Fall Time	tf	IF=50mA		500		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

