

L1050-35K42

Stem Type LED with High Output Power

L1050-35K42 is an InGaAsP LED mounted on a TO-46 stem with a unspherical glass lens being designed for high output power uses.

On forward bias, it emits a spectral band of radiation which peaks at 1050nm.

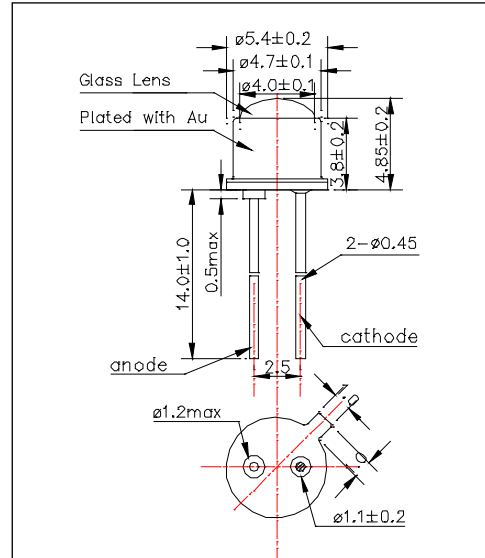
<Features>

- High Radiated Intensity
- High Reliability

<Specifications>

1. Product Name: NIR LED Lamp
2. Type Number: L1050-35K42
3. Chip:
 - Chip material: InGaAs/InP
 - Peak Wavelength: 1050nm
4. Package
 - Type: TO-46 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	100	mW	Ta=25°C
Forward Current	IF	80	mA	Ta=25°C
Pulse Forward Current*	IFP	300	mA	Ta=25°C
Reverse Voltage	VR	3	V	Ta=25°C
Operating Temperature	TOPR	-20 ~ +90	°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						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.2		V
Reverse Current	IR	VR=3V			10	uA
Total Radiated Power*	PO	IF=50mA		3.8		mW
Radiant Intensity**	IE	IF=50mA		7.2		mW/sr
Peak Wavelength	λP	IF=50mA	1000	1050	1100	nm
Half Width	Δλ	IF=50mA		100		nm
Viewing Half Angle	θ1/2	IF=50mA		±8		Deg.
Rise Time	tr	IF=50mA		10		ns
Fall Time	tr	IF=50mA		10		ns

* Measured by HAMAMATSU G8370-75

** Measured by Tektronics J116

