

L375R-42

UV LED Lamp with UV resistant resin

L375R-42 is an InGaN LED mounted on a lead frame with UV resistant resin.

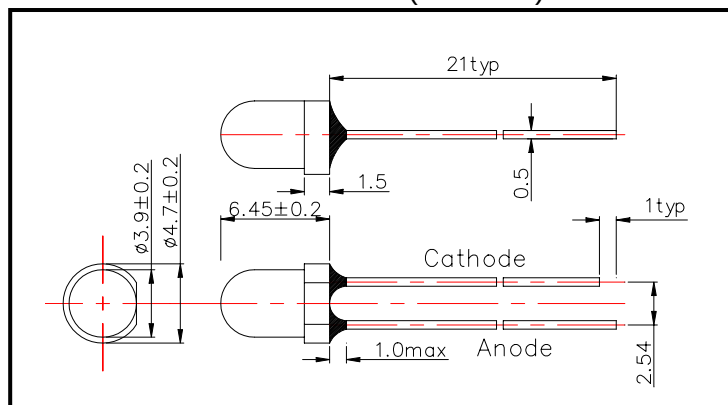
On forward bias, it emits a band of UV light that peaks 375nm.

This UV series is designed for long life under UV beam.

◆ Specifications

- 1) Product Name UV LED Lamp
- 2) Type No. L375R-42
- 3) Chip
 - (1) Chip Material InGaN
 - (2) Peak Wavelength 375nm.
- 4) Package
 - (1) Type Φ4mm clear molding
 - (2) Resin Material UV Resin
 - (3) Lead Frame Soldered (Lead Free)

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	240	mW	T _a =25°C
Forward Current	I _F	50	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Junction Temperature	T _J	120	°C	
Thermal Resistance	R _{thja}	360	K/W	
Operating Temperature	T _{OPR}	-30 ~ +105	°C	
Storage Temperature	T _{STG}	-40 ~ +105	°C	
Soldering Temperature	T _{SOL}	265	°C	

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal resistance: junction – ambient, leads 7mm, soldered on PCB.

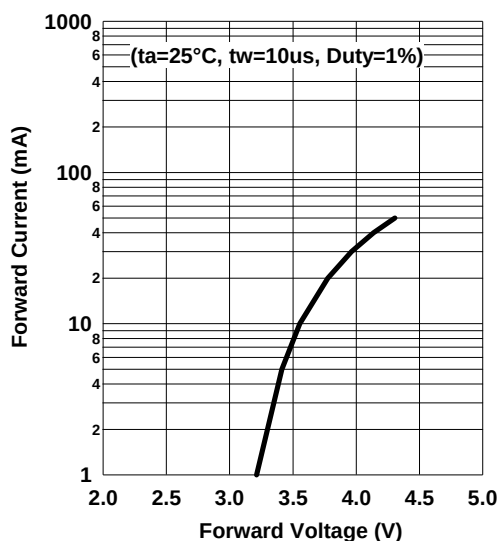
◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		3.8	4.3	V
		I _F =50mA		4.3	4.8	
Radiated Power	P _O	I _F =20mA	2.5	5.0		mW
		I _F =50mA		12.0		
Radiant Intensity	I _E	I _F =20mA		4.0		mW/sr
		I _F =50mA		9.5		
Peak Wavelength	λ _P	I _F =20mA	370	375	380	nm
Half Width	Δλ	I _F =20mA		10		nm
Viewing Half Angle	θ _{1/2}	I _F =20mA		±22		deg.

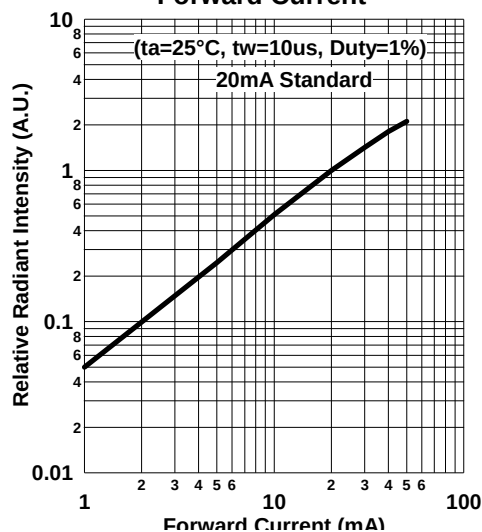
‡Radiated Power is measured by S3584-08.

‡Radiated intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2741

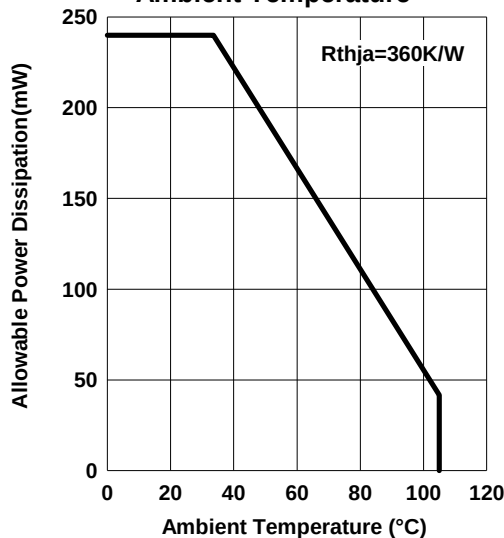
Forward Current - Forward Voltage



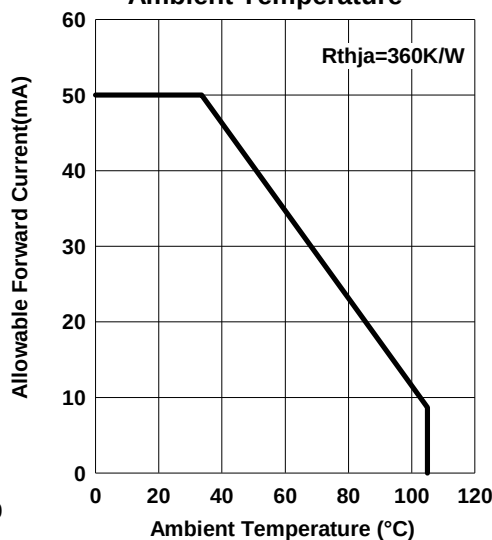
Relative Radiant Intensity - Forward Current



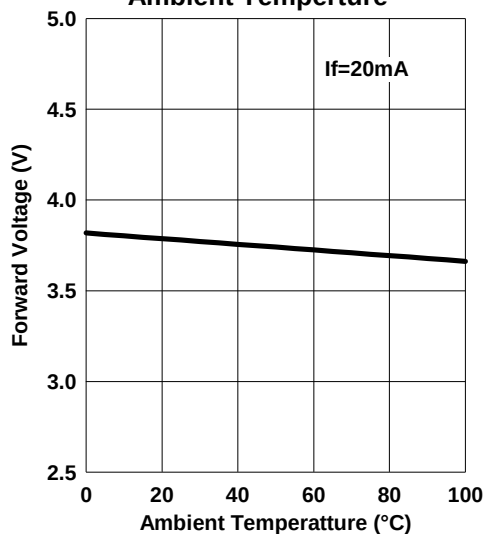
Allowable Power Dissipation - Ambient Temperature



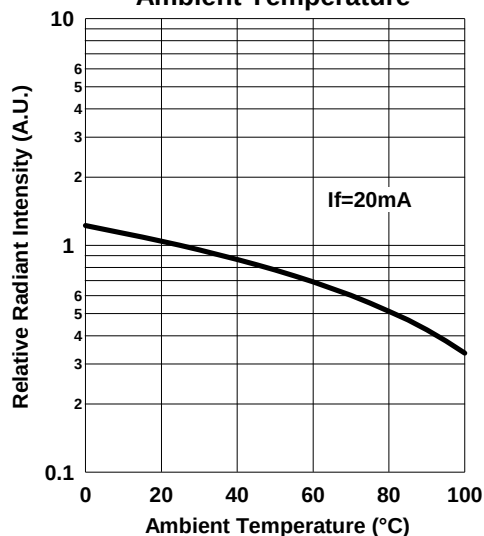
Allowable Forward Current - Ambient Temperature

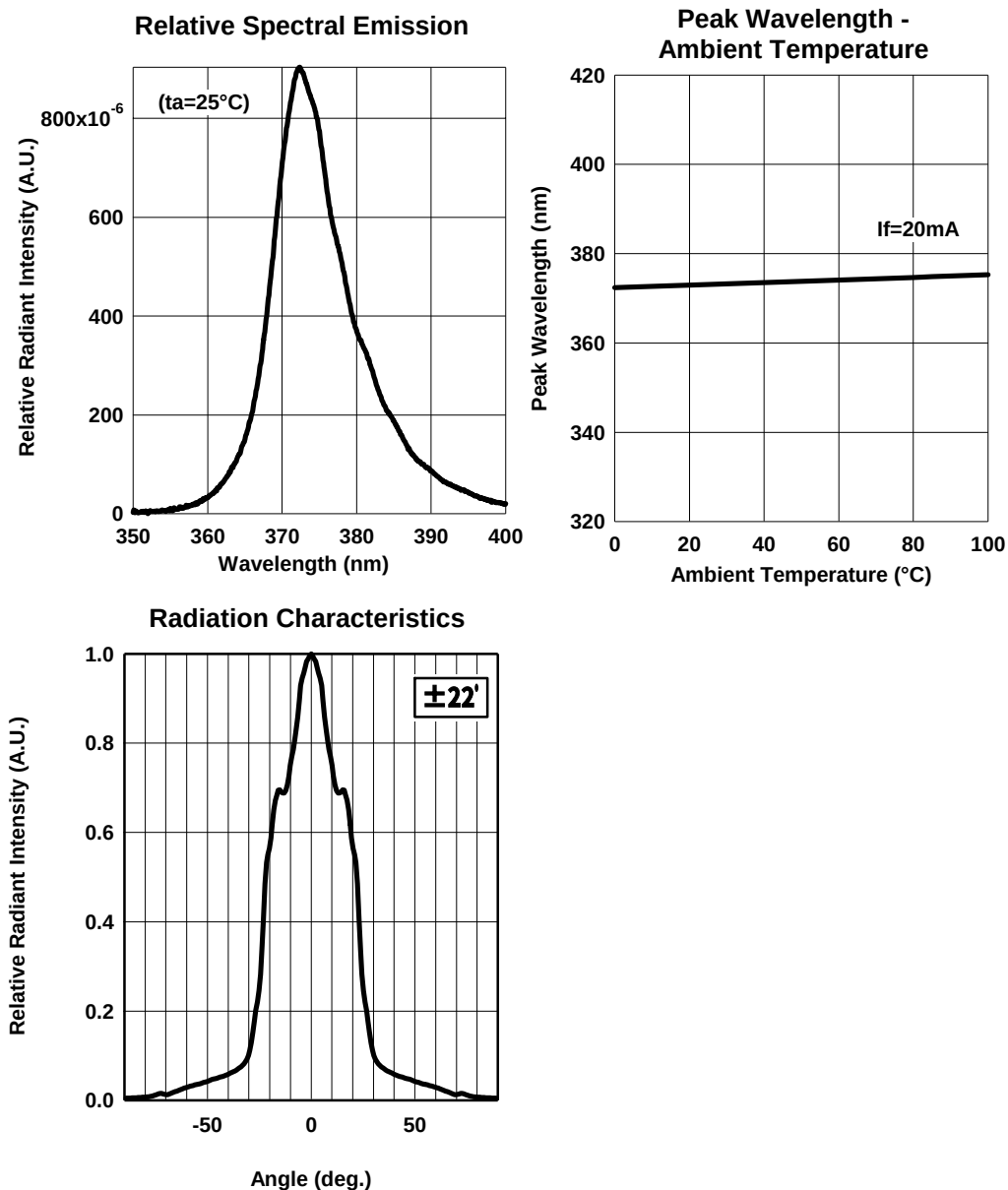


Forward Voltage - Ambient Temperature



Relative Radiant Intensity - Ambient Temperature





Handling Precautions of lead forming of silicone molded LED

1. The lead should be bent at a point 3mm away from the root of lead at mould plastic. Please avoid bending more than twice.
2. During forming, the root of lead is fixed with such as radio pliers, to which no mechanical stress should be applied. This caused breakdown of LED.
3. Forming pitch should be adjusted to the device insertion hole-pitch on the PCB.
4. All forming must be performed prior to soldering.
5. Avoid excessive stress to the lead when mounting.