L418R-04

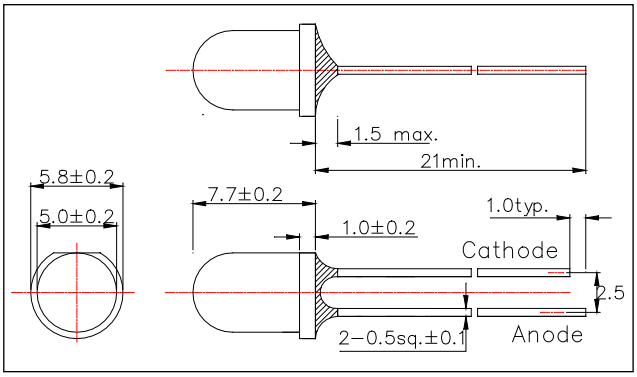
UV LED Lamp with UV Resistant Resin

L418R-04 is an InGaN LED mounted on a lead frame with UV resistant resin.
On forward bias, it emits a band of visible light that peaks 413~422nm.
This UV series is designed for long life under UV beam.

<Specifications>

1. Product Name: UV LED Lamp
2. Type Number: L418R-04
3. Chip:
   - Chip material: InGaN
   - Peak Wavelength: 413~422nm typ.
4. Package
   - Type: Φ5mm clear molding
   - Resin Material: UV Resin
   - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25℃]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	220	mW
Forward Current	IF	50	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	℃
Thermal Resistance*	Rthja	230	K/W
Operating Temperature	TOPR	-40 ~ +85	℃
Storage Temperature	TSTG	-40 ~ +100	℃
Soldering Temperature**	TSOL	265	℃

* Junction - ambient, leads 7mm, soldered on PCB.
** Soldering condition must be completed within 3 second at 265℃.

Electro-Optical Characteristics						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA	3.0	3.4	4.0	V
Reverse Current	IR	VR=5V			10	uA
Radiated Power*	PO	IF=20mA	18.0	24.0		mW
Radiant Intensity**	IE	IF=20mA		28		mW/sr
Brightness***	IV	IF=20mA		40		mcd
Peak Wavelength	λP	IF=20mA	413	418	422	nm
Half Width	Δλ	IF=20mA		16		nm
Viewing Half Angle	θ1/2	IF=20mA		± 20		deg

* Measured by S3584-08
** Measured by Ando Optical Multi Meter AQ2140&AQ2741
*** Measured by Tektronix J-16

RoHS Compliant

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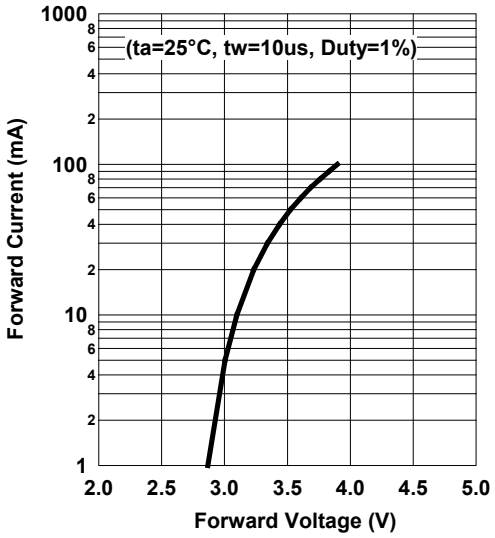
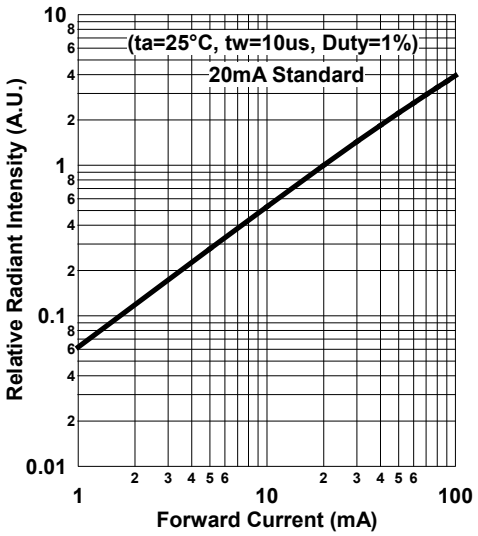
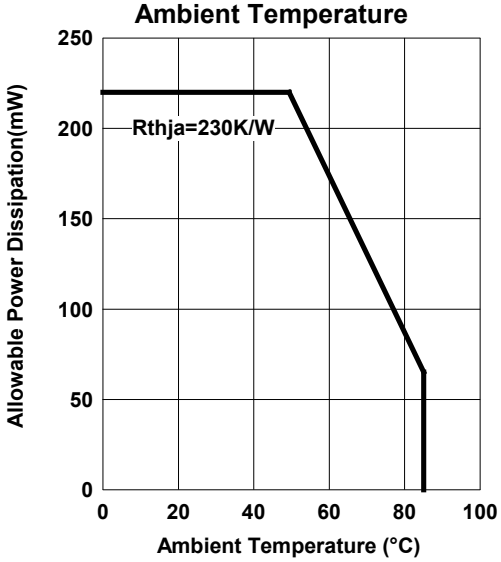
Forward Curent - Forward Voltage



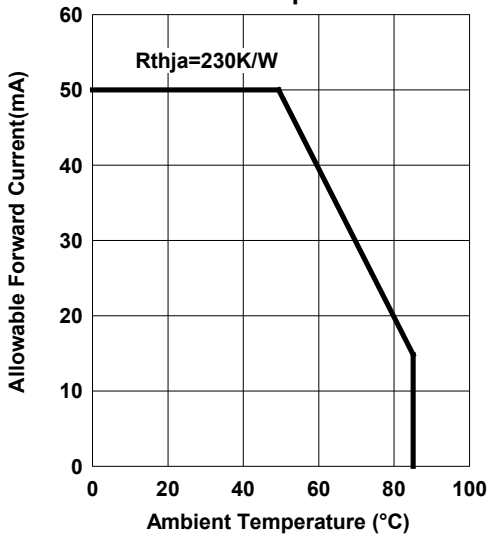
Relative Radiant Intensity - Forward Current



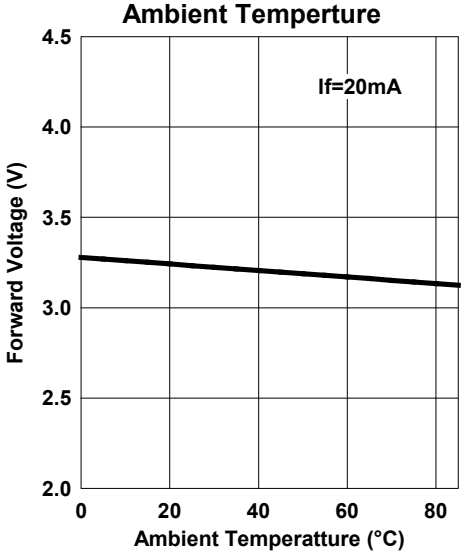
Allowable Power Dissipation - Ambient Temperature



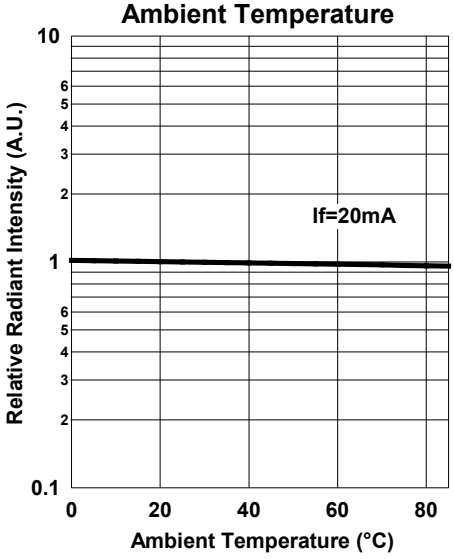
Allowable Forward Current - Ambient Temperature

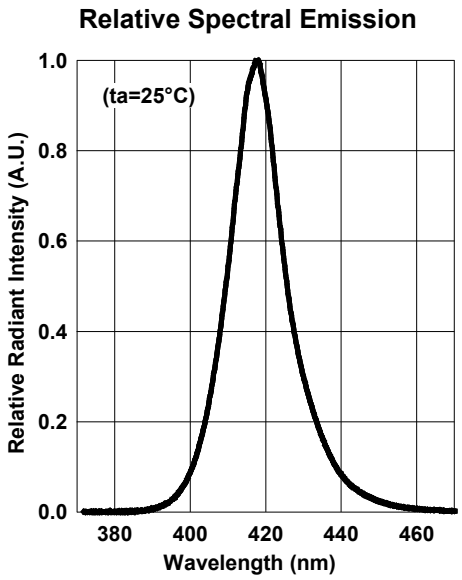


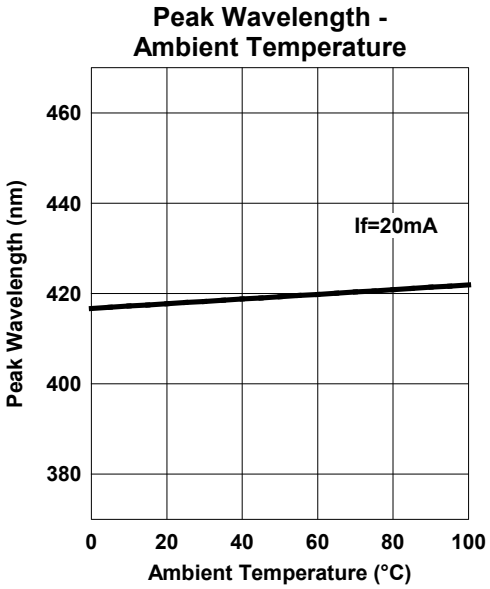
Forward Voltage - Ambient Temperture

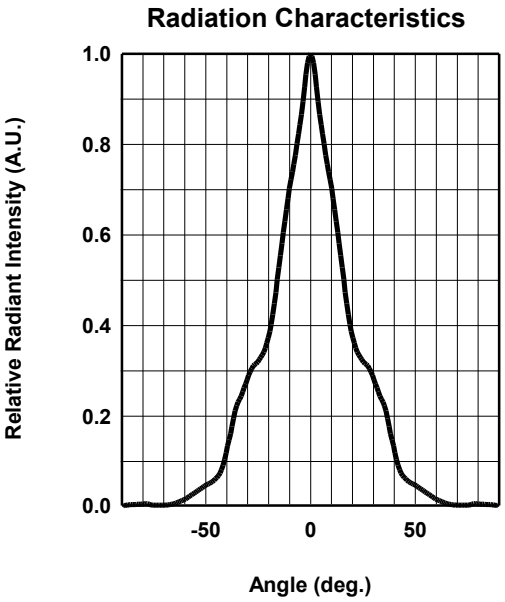


Relative Radiant Intensity - Ambient Temperature









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.