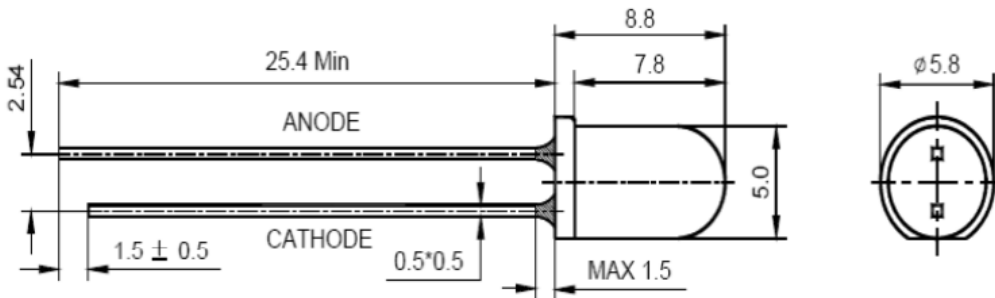


## 1. Features:

Lighting Color: White  
Lens Color: Water Clear

## 2. (Package Dimensions):



## 3. Electrical Optical Characteristics (Ta = 25°C):

Parameter	Symbol	Min	Type	Max	Unit	Test Condition
Luminous Intensity	IV	18.000	20.000	--	mcd	IF=20mA
Color Temperature	T	--	6.500	--	K	IF=20mA
Forward Voltage	VF	2.8	--	3.8	V	IF=20mA
Reverse Current	IR	--	--	5	uA	VR=5V
Viewing Angle	2θ1/2	--	20	--	deg	IF=20mA

Notes:

Absolute maximum ratings Ta=25°C

Tolerance of measurements of forward voltage ± 0.2V

Tolerance of measurements of peak Wavelength ± 2.0nm

Tolerance of measurements of luminous intensity ± 15%

Electrostatic sensitive device when handling, please use anti-electrostatic gloves.

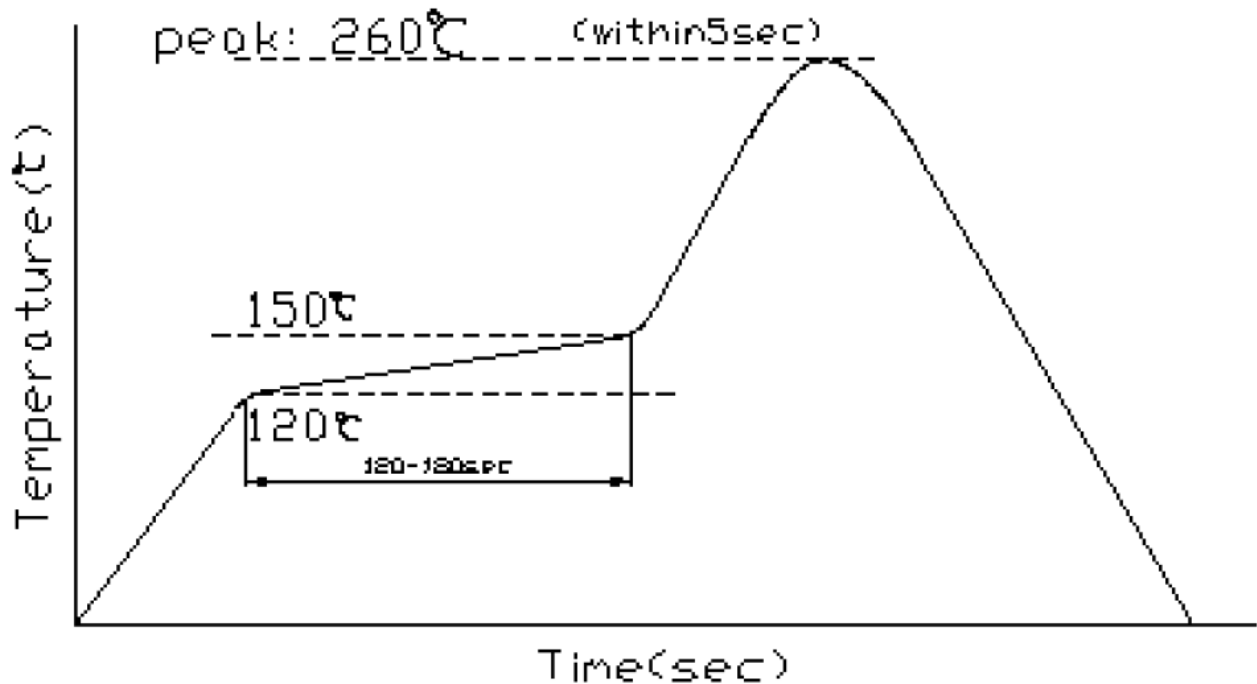
Please do not apply stress to the resin at high temperature

## 4. Absolute Maximum Ratings (Ta=25°C):

Parameter	(Rating)	(Unit)
Reverse Voltage	5	V
Power Dissipation, Per Dice	100	mW/chip
Operating Temperature Ranger	-40 ~ +85	°C
Storage Humidity	45% ~85%	RH
Storage Temperature Ranger	-40~+100	°C
Soldering Temperature	260°C for 5 Seconds Max.	
Peak IF(ma) (1/10Duty Cycle 0.1ms Pulse Width)	100	mA/chip
Continuous Forward Current	30	mA/chip

**5. (Reliability Performance):**

Test Classification	Test Item	Test Condition	Test Duration	Sample QTY	AC/RE
<b>Life Test</b>	Room Temperature DC Operating Life Test	Ta=25°C ± 5°C, IF=20mA	1000hrs	30pcs	0/1
<b>Environment Test</b>	Thermal Shock Test	-10°C ± 5°C ←→+100°C± 5°C 5min. 10sec. 5min.	50 cycles	30pcs	0/1
	Temperature Cycle Test	-40°C ± 5°C ←→+25°C± 5°C← → +85°C ± 5°C 30min. 5min. 30min.	50 cycles	30pcs	0/1
	High Temperature & High Humidity Test	Ta=85°C ± 5°C RH= 85%±0.5 % RH	1000hrs	30pcs	0/1
	High Temperature Storage	Ta=100°C ± 5°C	1000hrs	30pcs	0/1
	Low Temperature Storage	Ta=-55°C ± 5°C	1000hrs	30pcs	0/1
<b>Mechanical Test</b>	Resistance to Soldering Heat	Ta=230°C ± 5°C	5 sec.	30pcs	0/1
	Lens Integrity	Load 2.5N (0.25kgf) 0° ~ 90° ~ 0°	3 times	30pcs	0/1

**6. (Recommended Wave Soldering Profiles):**

## Characteristic Curves:

Fig.1 – Relative luminous Intensity vs. Forward Current

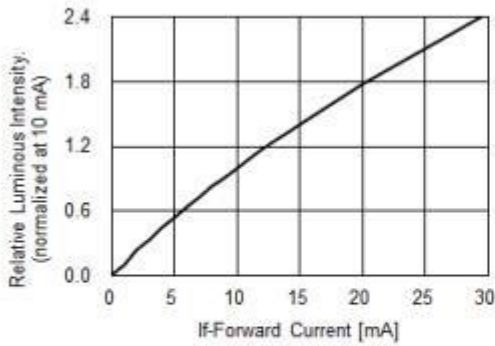


Fig.2 – Forward Current vs. Forward Voltage

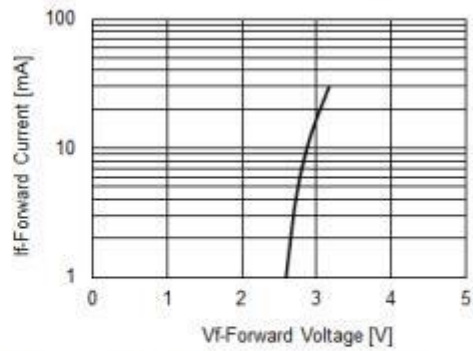


Fig.3 – Relative Intensity (@10mA) vs. Ambient Temperature

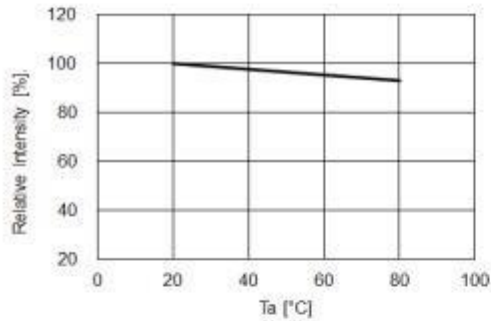


Fig.4 – Forward Voltage (@10mA) vs. Ambient Temperature

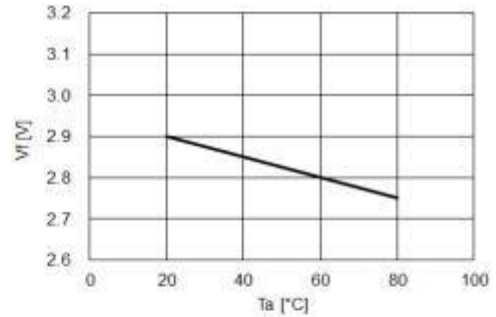


Fig.5 – Dominant Wavelength (@10mA) vs. Ambient Temperature

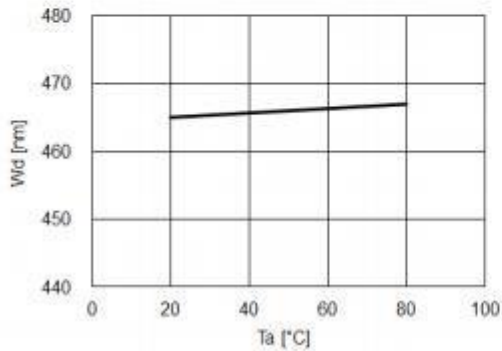


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 115°C)

