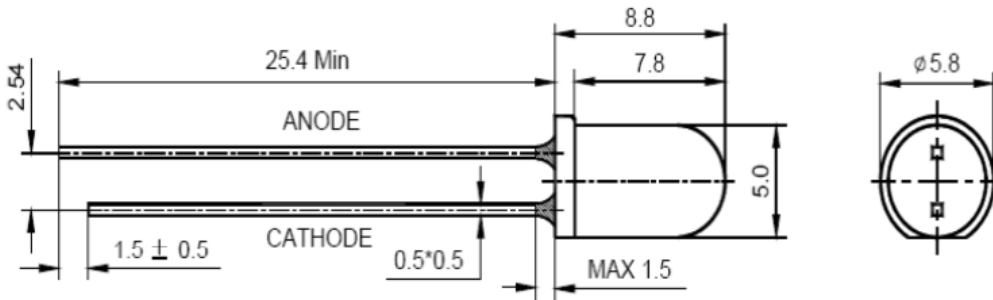


**1. Features:**

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
<b>Luminous Intensity</b>	IV	11.000	16.000	--	mcd	IF=20mA
<b>Color Temperature</b>	T	--	6.500	--	K	IF=20mA
<b>Forward Voltage</b>	VF	2.8	--	3.6	V	IF=20mA
<b>Reverse Current</b>	IR	--	--	5	uA	VR=5V
<b>Viewing Angle</b>	2θ1/2	--	20	--	deg	IF=20mA

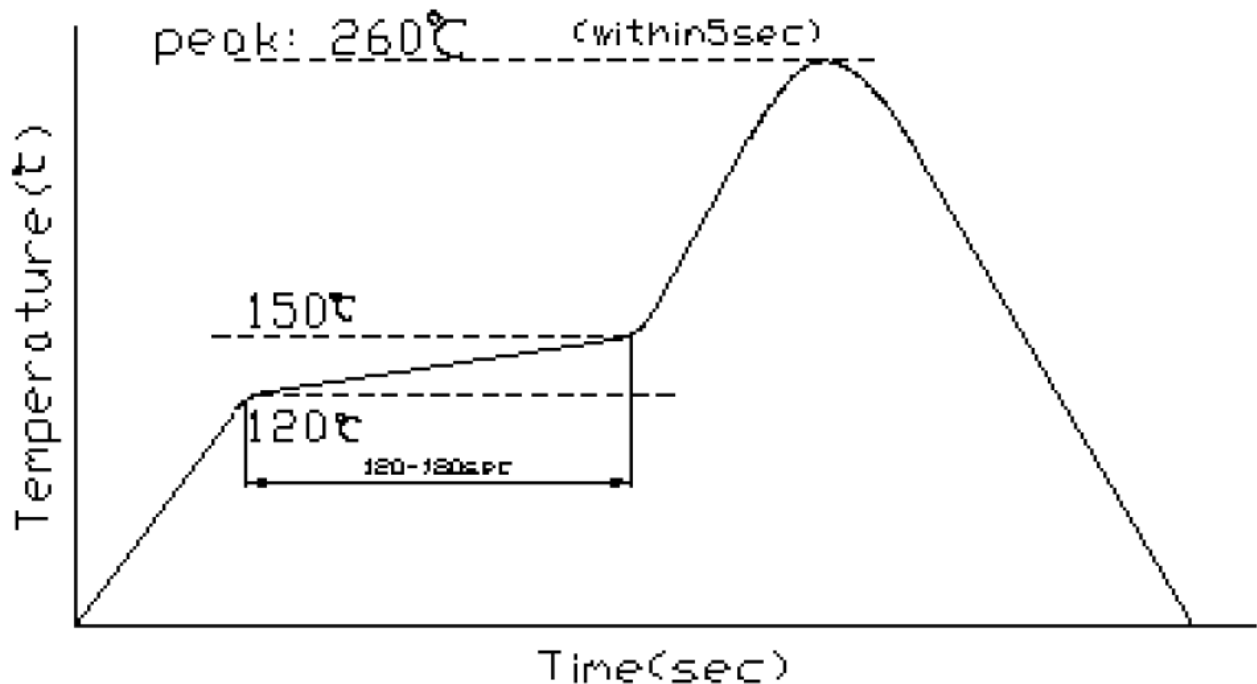
Notes:  
 Absolute maximum ratings Ta=25°C  
 Tolerance of measurements of forward voltage ± 0.2V  
 Tolerance of measurements of peak Wavelength ± 2.0nm  
 Tolerance of measurements of luminous intensity ± 15%  
 Electrostatic sensitive device when handling, please use anti-electrostatic gloves.  
 Please do not apply stress to the resin at high temperature

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

Parameter	(Rating)	(Unit)
<b>Reverse Voltage</b>	5	V
<b>Power Dissipation, Per Dice</b>	100	mW/chip
<b>Operating Temperature Ranger</b>	-40 ~ +85	°C
<b>Storage Humidity</b>	45% ~85%	RH
<b>Storage Temperature Ranger</b>	-40~+100	°C
<b>Soldering Temperature</b>	260°C for 5 Seconds Max.	
<b>Peak IF(ma) (1/10Duty Cycle 0.1ms Pulse Width)</b>	100	mA/chip
<b>Continuous Forward Current</b>	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
	Thermal Shock Test	-10°C ± 5°C ←→+100°C± 5°C 5min. 10sec. 5min.	50 cycles	30pcs	0/1
<b>Environment Test</b>	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

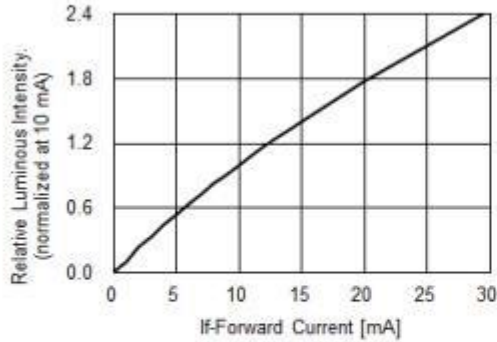


Fig.2 – Forward Current vs. Forward Voltage

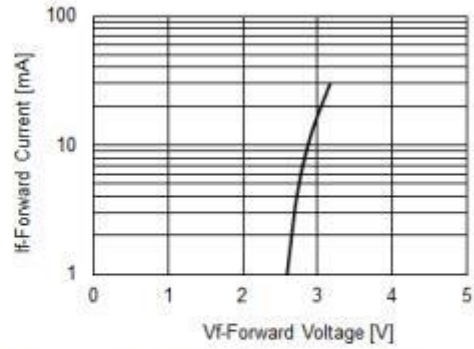


Fig.3 – Relative Intensity (@10mA) vs. Ambient Temperature

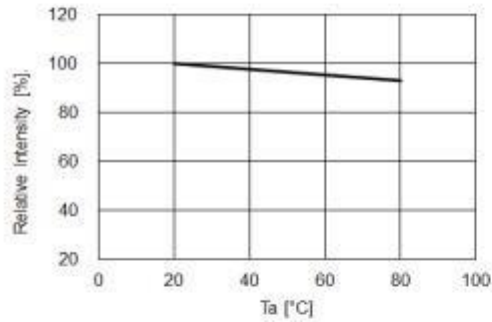


Fig.4 – Forward Voltage (@10mA) vs. Ambient Temperature

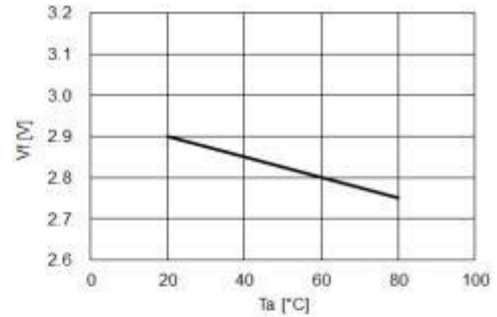


Fig.5 – Dominant Wavelength (@10mA) vs. Ambient Temperature

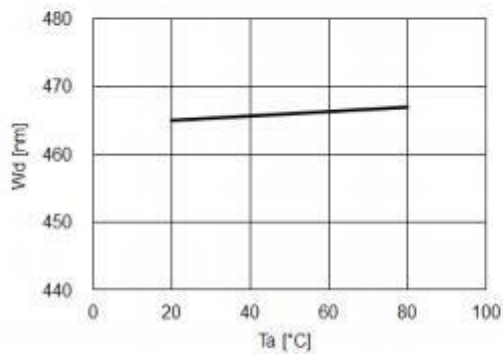


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 115°C)

