



Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	20	mA
Peak Forward Current*	I_{FP}	160	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	85	mW
Electrostatic discharge	E_{SD}	400	V
Operation Temperature	T_{opr}	-25 +80	
Storage Temperature	T_{stg}	-40 +80	
Lead Soldering Temperature*	T_{sol}	Max. 230 for 5sec Max.	

* I_{FP} Conditions : Pulse Width 10msec duty 1/10

* T_{sol} Conditions : 3mm from the base of the epoxy bulb

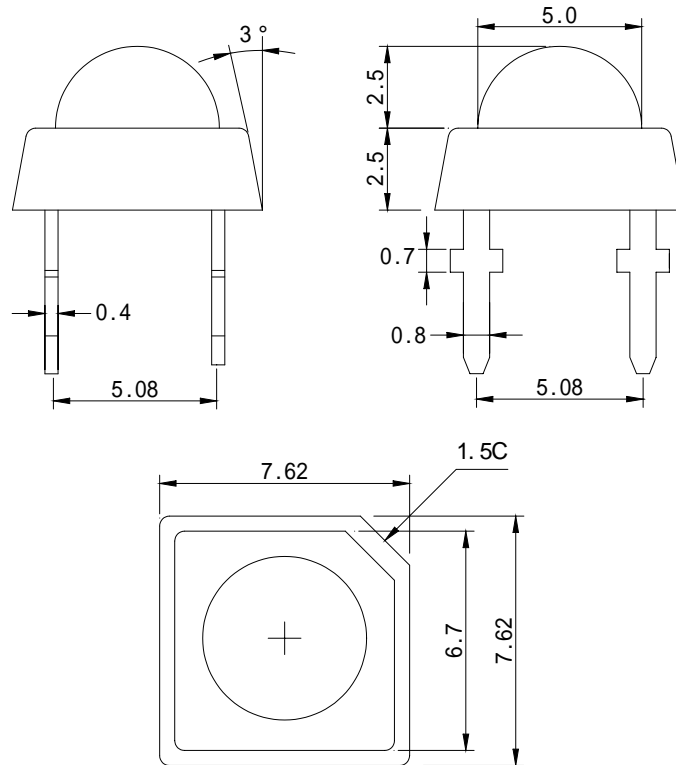
Typical Optical/ Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20mA$	3.0	3.4	3.8	V
Reverse Current	I_R	$V_r=5V$	--	--	10	μA
50% Power Angle	2 1/2	$I_F=20mA$	--	65	--	deg
Luminous Intensity	I_v	$I_F=20mA$	300	500	--	mcd
Peak Wavelength	λ_p	$I_F=20mA$	--	467	--	nm
Recommend Forward Current	$I_F(rec)$	--	--	10~20	--	mA

Notes:

1. Absolute maximum ratings $T_a=25$.
2. Tolerance of measurement of forward voltage $\pm 0.1V$.
3. Tolerance of measurement of peak Wavelength $\pm 2.0nm$.
4. Tolerance of measurement of luminous intensity $\pm 15\%$.

Package Dimensions And Materials



Chip		Lens Color
Material	Emitting Color	
InGaN/SiC	BLUE	Water clear

Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is $\pm 0.2\text{mm}$ unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.
4. Burr around bottom of epoxy may be 0.5mm max..



Reliability Performance

1. Test Items And Result

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

2. Criteria for Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min.	Max.
Forward Voltage	V _F	I _F =20mA		U.S.L.*1.2
Reverse Current	I _R	V _R =5V		U.S.L.*2.2
Luminous Intensity	I _V	I _F =20mA	L.S.L.** x 0.7	

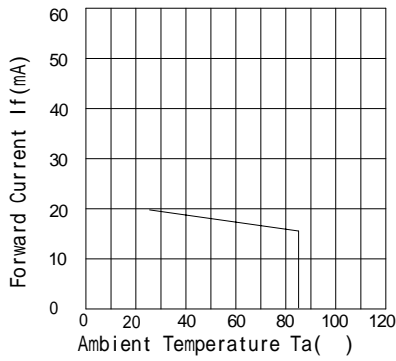
U.S.L.* : Upper Standard Level

L.S.L.** : Lower Standard Level

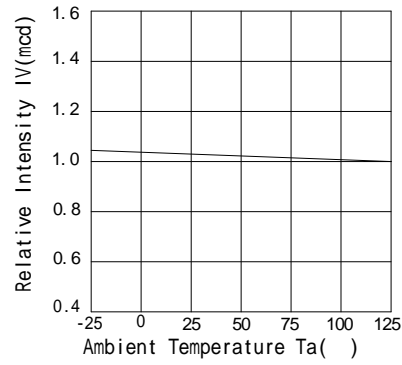
Typical Optical/Electrical Characteristics Curves

($T_a=25$ Unless Otherwise Noted)

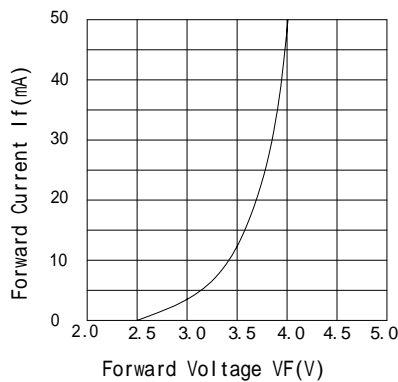
Forward Current vs. Ambient Temperature



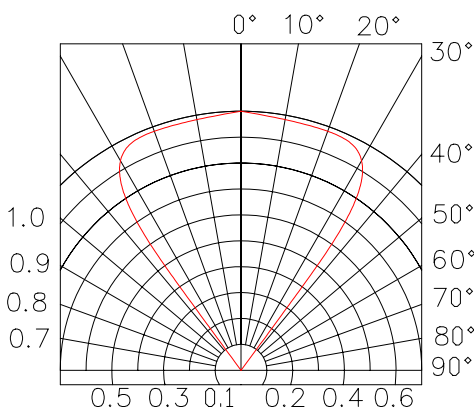
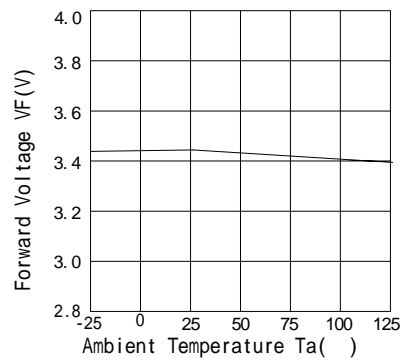
Relative Intensity I_V (mod) vs. Ambient Temperature



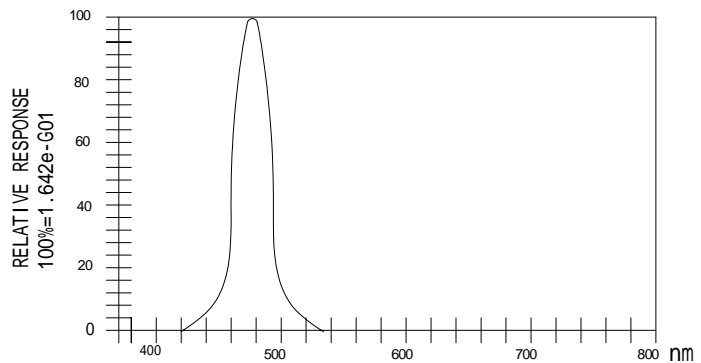
Forward Current vs. Forward Voltage



Forward Voltage vs. Ambient Temperature



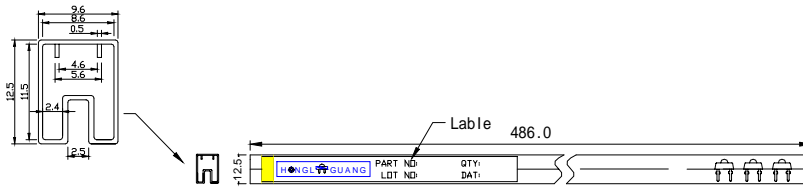
Luminous Spectrum ($T_a=25$) SPECTRAL RADIANCE





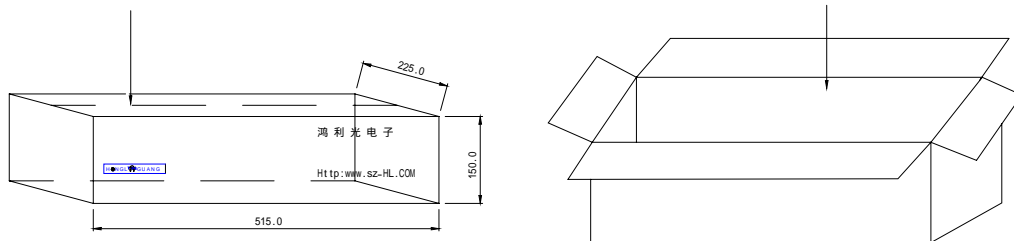
Package means

1.Package Adhesive Pipe.



Notes: Each Adhesive Pipe 60pcs.

2.Superficial Package paper boxes.



Notes: Each paper boxes 238 bar .