■ Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	80	mA
Peak Forward Current*	I_{FP}	400	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	300	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

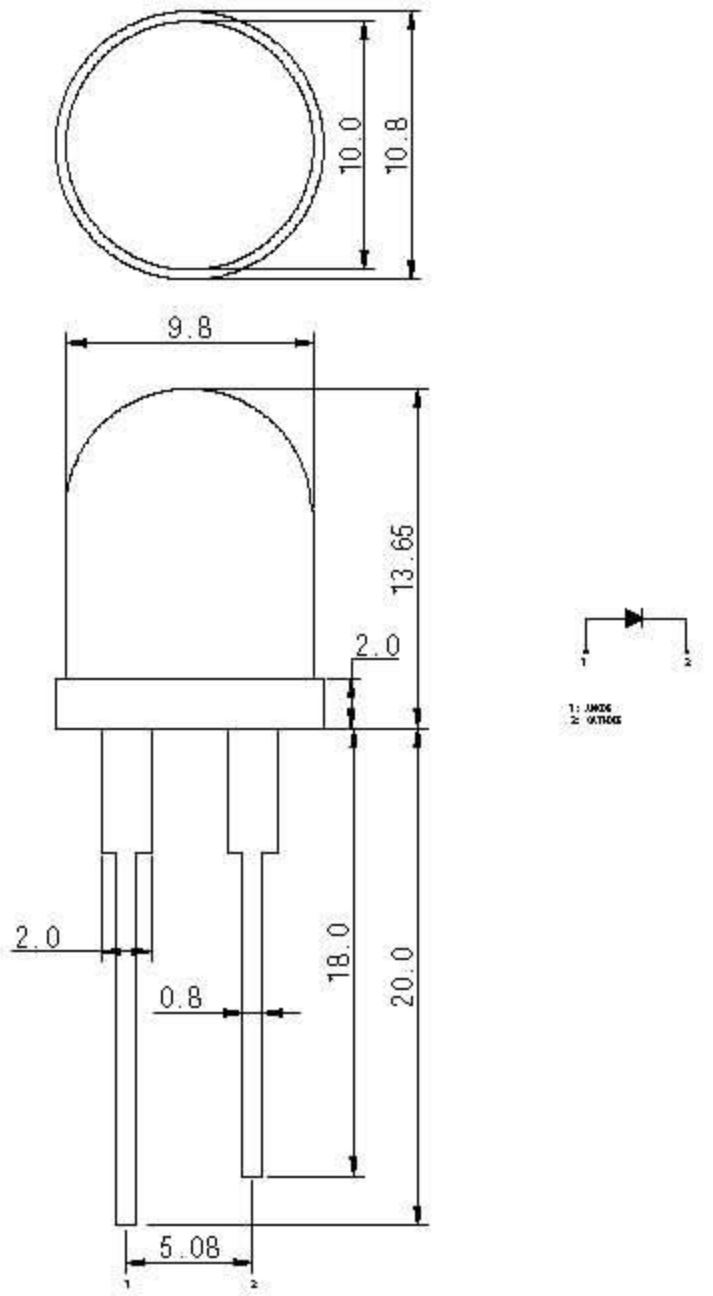
■ Typical Optical/ Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=80mA	3.0	3.4	3.8	V
Reverse Current	I_R	Vr=5V	--	--	10	uA
50% Power Angle	2 θ 1/2	I_F=80mA	--	35	--	deg
Luminous Intensity	I_V	I_F=80mA	8500	12000	--	mcd
Recommend Forward Current	I_F(rec)	--	--	80	--	mA

Notes:

1. Absolute maximum ratings Ta=25℃.
2. Tolerance of measurement of forward voltage ±0.1V.
3. Tolerance of measurement of peak Wavelength ±2.0nm.
4. Tolerance of measurement of luminous intensity ±15%.

■ Package Dimensions And Materials



Chip		Lens Color
Material	Emitting Color	
GaN/SiC	WHITE	Water clear

Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ±0.2mm 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=80mA	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=80mA		U.S.L.*1.2
Reverse Current	I_R	V_R=5V		U.S.L.*2.2
Luminous Intensity	Iv	I_F=80mA	L.S.L**×0.7	

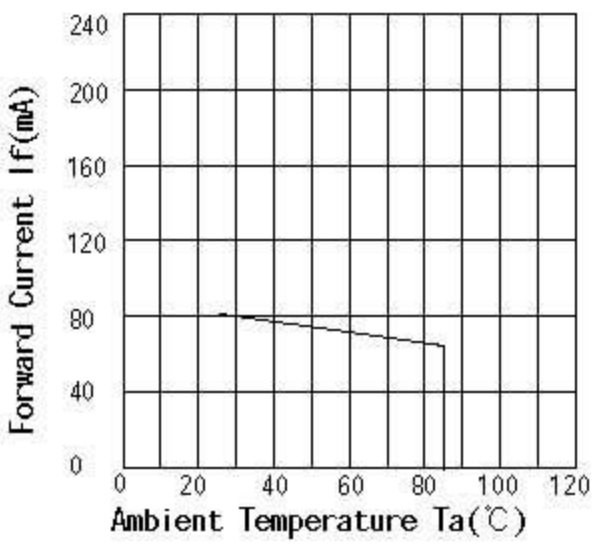
U.S.L.* : Upper Standard Level

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

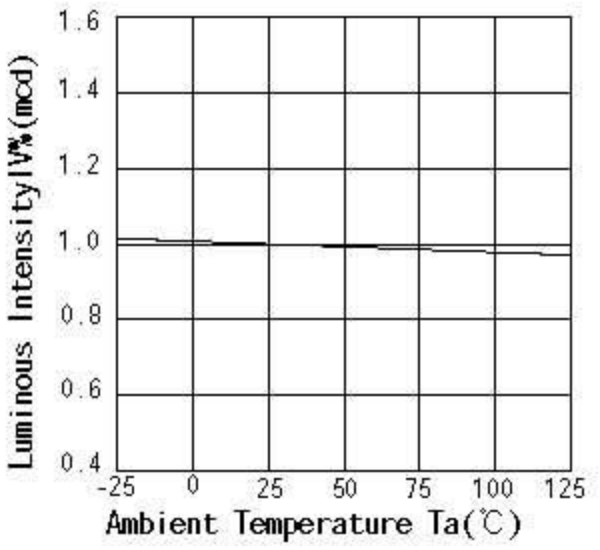
■ Typical Optical/Electrical Characteristics Curves

(Ta=25℃ Unless Otherwise Noted)

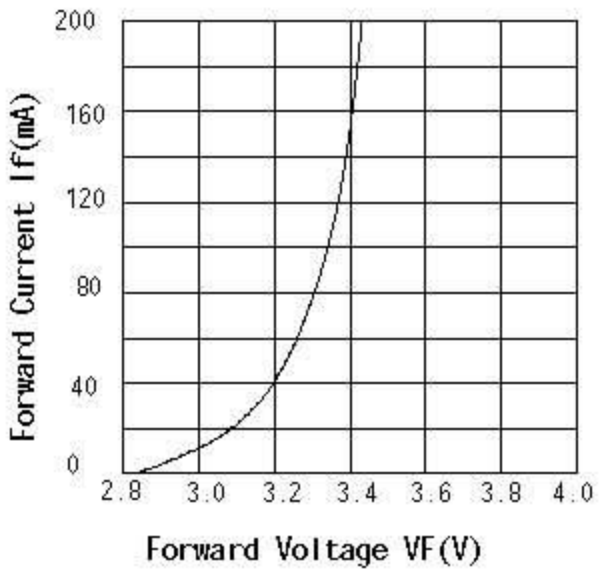
Forward Current vs. Ambient Temperature



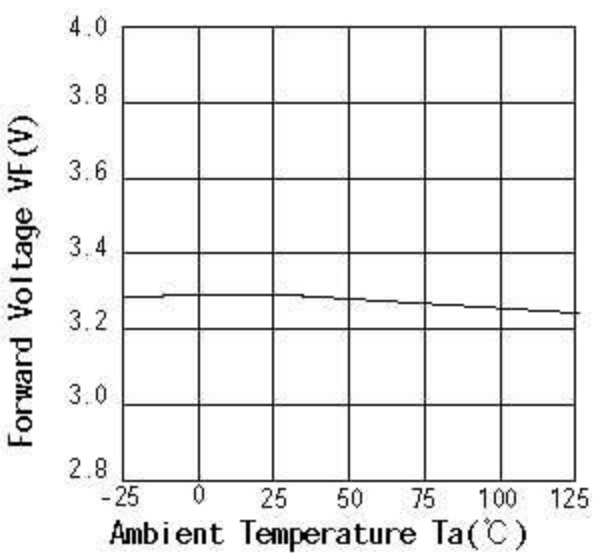
Relative Intensity vs. Ambient Temperature

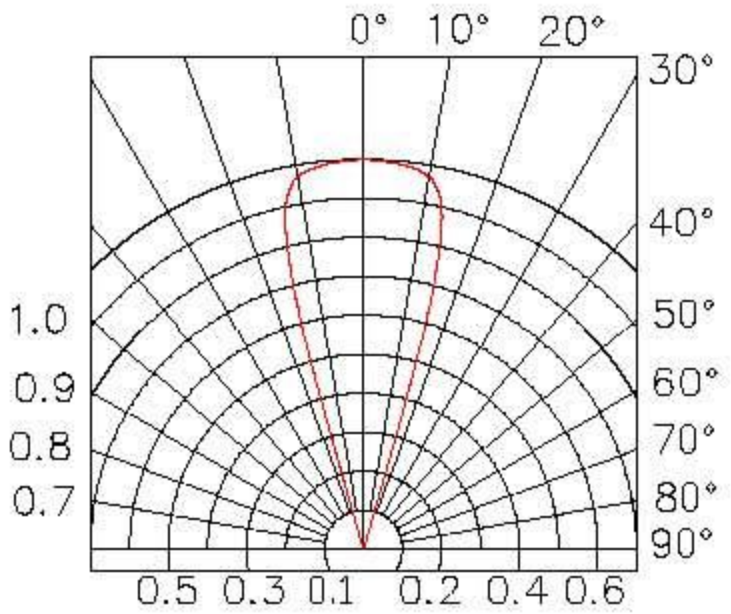


Forward Current vs.Forward Voltage



Forward Voltage vs. Ambient Temperature





■Chromaticity Coordinates Specifications for Bin Grading

Bin	Chromaticity Coordinates				
$A_1 \backsim A_{17}$	X	0.21	0.21	0.47	0.47
	y	0.33	0.35	0.44	0.46
$B_1 \backsim B_{17}$	X	0.21	0.21	0.47	0.47
	y	0.31	0.33	0.42	0.44
$C_1 \backsim C_{17}$	X	0.21	0.21	0.47	0.47
	y	0.29	0.31	0.40	0.42
$D_1 \backsim D_{17}$	X	0.21	0.21	0.47	0.47
	y	0.27	0.29	0.38	0.40
$E_1 \backsim E_{17}$	X	0.21	0.21	0.47	0.47
	y	0.25	0.27	0.36	0.38
$F_1 \backsim F_{17}$	X	0.21	0.21	0.47	0.47
	y	0.23	0.25	0.34	0.36
$G_1 \backsim G_{17}$	X	0.21	0.21	0.47	0.47
	y	0.21	0.23	0.32	0.34
Change Area Coordinate Quotiety		X±0.02		y±0.02