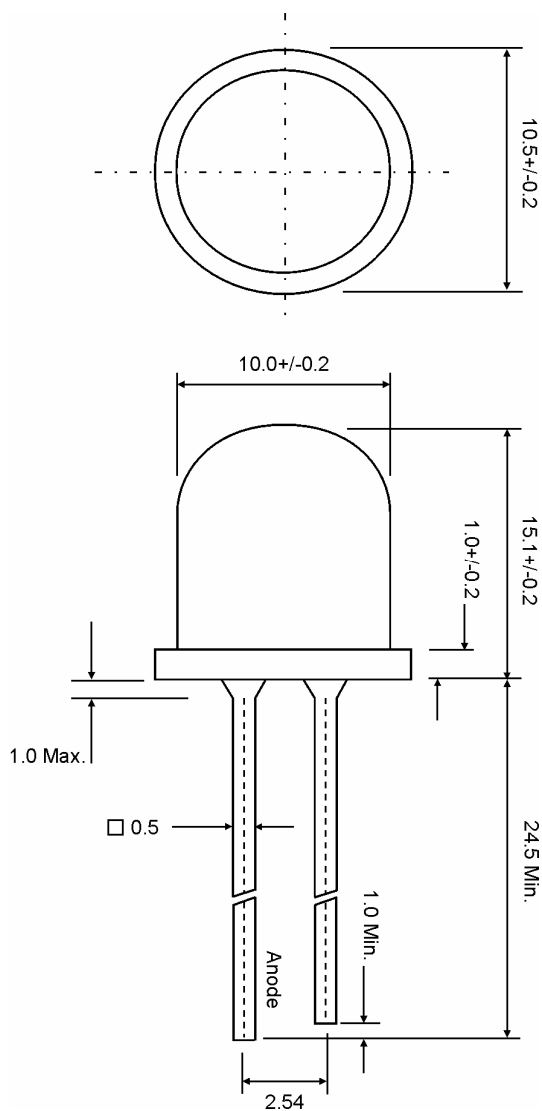


Package Dimensions



Characters

- 10mm Round
- Reliable and Rugged
- Low Power Consumption
- Low Working Current

Functions

- Back-Lighting
- Light Guide

Notes

1. All Dimensions are in millimeters
2. Tolerance is ± 0.25 mm unless otherwise noted
3. Protruded resin under flange is 1.0mm max.
4. Lead measured where the leads emerge from the package
5. ESD Class (Mil-Std-883d Method 3015.7) based on Human Body Mode : 1000V (Ave.)

Chip Material	Emitting Color	Lens Color
GaN	White	Water Clear



Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _V	4000	5000		mcd	I _F = 20mA
Viewing Angle *	2θ ^{1/2}		20		Deg.	
Chromaticity Coordinates	X		.29			
	Y		.28			
Spectrum Radiation Bandwidth	Δλ		21		nm	
Forward Voltage	V _F	3.0	3.3	3.6	V	
Recommended Working Current	R _{IF}	10	20	25	mA	

* Viewing Angle is defined as the off-axis angle where the Luminous Intensity is 1/2 the peak intensity.

Absolute Maximum Ratings (Ta=25°C)

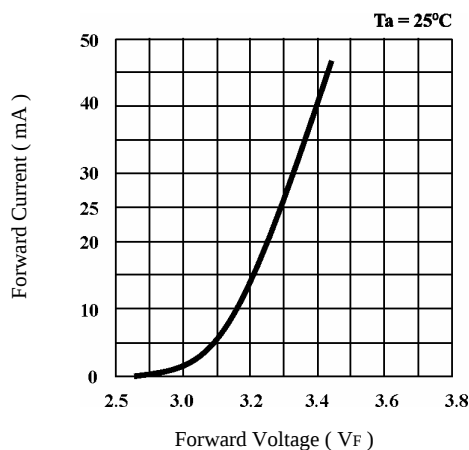
Parameter	Symbol	Max.	Unit
Power Dissipation	P _D	100	mW
DC Forward Current	I _F	30	mA
Peak Forward Current #	I _{PF}	120	mA
Reverse Voltage	V _R	5	V
Reverse Current	I _R	10	uA
Operation Temperature Range	T _{opr}	+ 80 ~ - 30	Deg.
Storage Temperature Range	T _{stg}	+ 100 ~ - 40	Deg.
Soldering Temperature Range *	T _{sol}	260°C for 5 Seconds	Deg.

Duty Ratio = 1/16 , Pulse width = 0.1ms

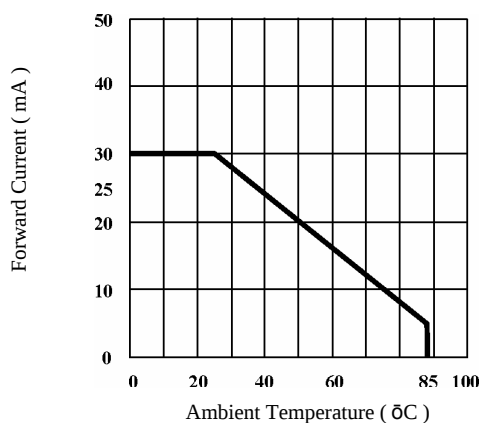
* Lead Soldering Temperature Range (1.6mm from LED Body)

Typical Electro-Optical Characteristics Curves

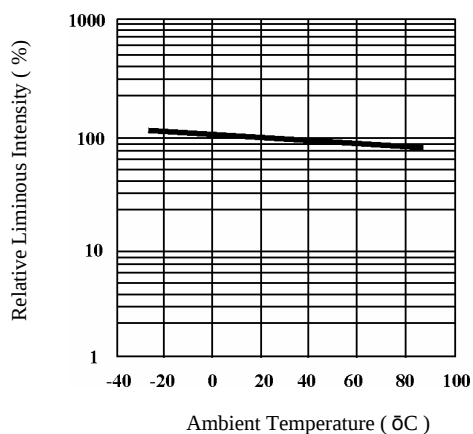
Forward Current VS Forward Voltage



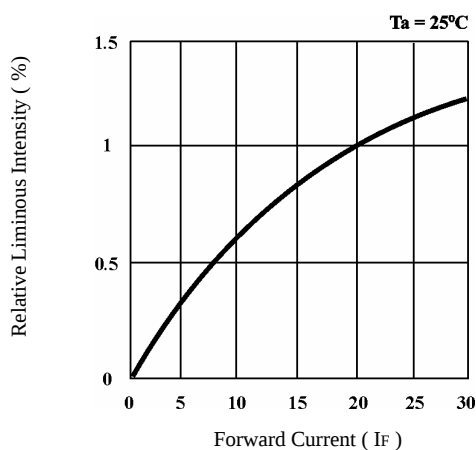
Forward Current VS Ambient Temperature



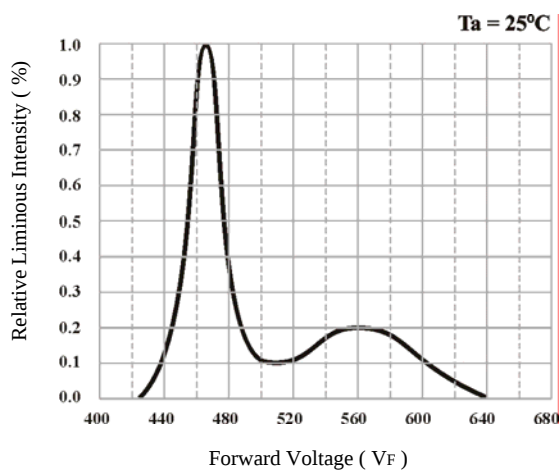
Luminous Intensity VS Ambient Temperature



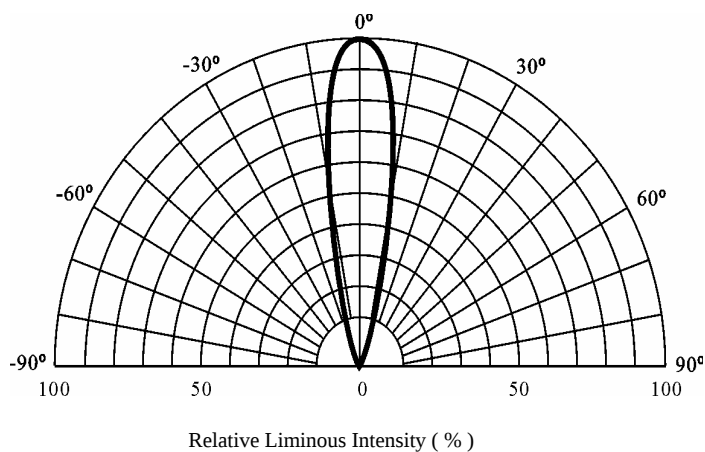
Luminous Intensity VS Forward Current



Spectrum Distribution



Viewing Angle Diagram



Luminous Intensity Range Sorting System

Normal Bright		Super Bright		Ultra Bright	
N1	30-40	S1	300-400	U1	3000-4000
N2	40-50	S2	400-500	U2	4000-5000
N3	50-70	S3	500-700	U3	5000-7000
N4	70-100	S4	700-1000	U4	7000-10000
N5	100-130	S5	1000-1300	U5	10000-13000
N6	130-160	S6	1300-1600	U6	13000-16000
N7	160-200	S7	1600-2000	U7	16000-20000
N8	200-250	S8	2000-2500	U8	20000-25000
N9	250-300	S9	2500-3000	U9	25000-30000