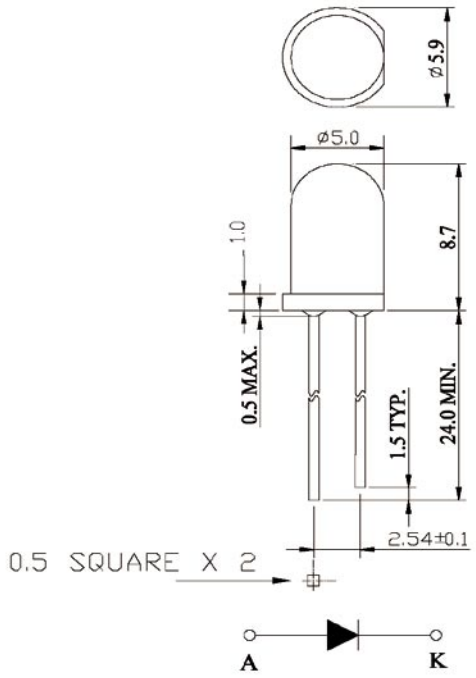


All dimensions are in mm.
Tolerance is ± 0.25 mm unless otherwise noted.

AND820HW

Standard LED
T-1 Package (5 mm)

The white bright lamp is made with InGaN chip and water clear epoxy resin.

Features

- Low power consumption
- Popular T-1 diameter package
- General purpose leads
- Reliable and rugged
- Long life - solid state reliability
- Available on tape and reel
- RoHS compliant

Maximum Ratings (Ta - 25 ºC)

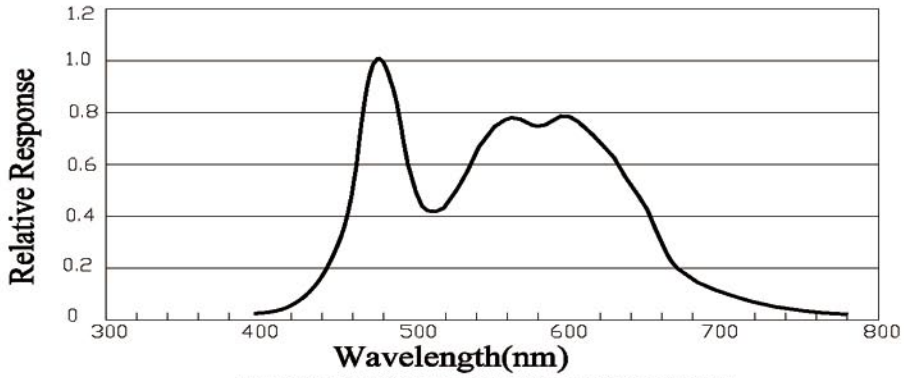
LED Chip		Lens Color
Material	Emitting Color	
InGaN	White	Water clear

Absolute Maximum Ratings (Ta - 25 ºC)

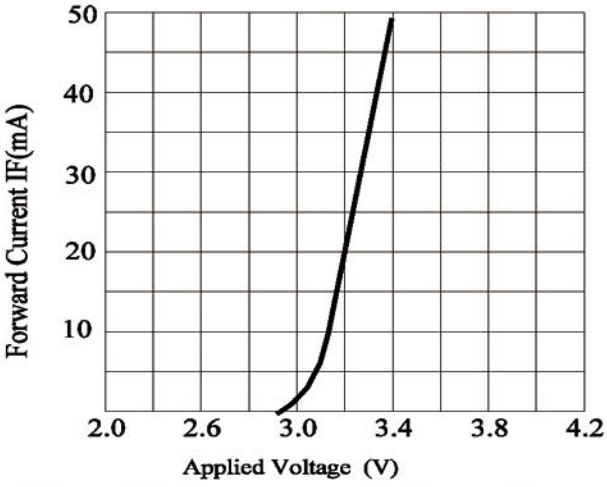
Item	Symbol	Rating	Unit
Power Dissipation	P_D	120	mW
DC Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Reverse (Leakage) Current	I_R	50	μA
Peak Current (1/10 Duty Cycle, 0.2 ms Pulse Width)	I_F(Peak)	100	mA
Operating Temperature Range	T_{OPR}	-25 to +85	ºC
Storage Temperature Range	T_{STG}	-40 to +100	V
Solder Temperature (1.6 mm from body)	T_{SOL}	Dip Soldering: 260ºC for 5 seconds Dip Soldering: 350ºC for 3 seconds	
Electronic Discharge	ESD.	6000	V

Electrical/Optical Characteristics at Ta=25º C

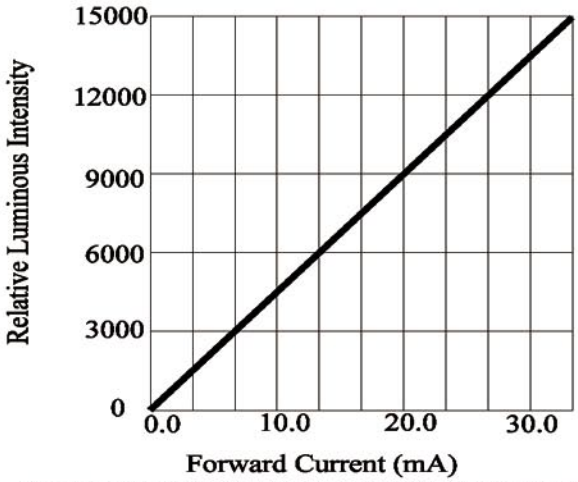
Item	Symbol	Test Condition	Minimum	Typical	Maxiumum	Unit
Luminous Intensity	I_V	I_F = 20 mA	4800	9000	–	mcd
Forward Voltage	V_F	I_F = 20 mA	–	3.2	4.0	V
CIE Chromaticity Coordinates: X Axis	X	I_F = 20 mA	–	0.31	–	–
CIE Chromaticity Coordinates: X Axis	Y	I_F = 20 mA	–	0.30	–	–
Reverse (Leakage) Current	I_R	V_R = 5 V	– –		50	μA
Viewing Angle	2 θ 1/2	I_F = 20 mA		–	20	deg



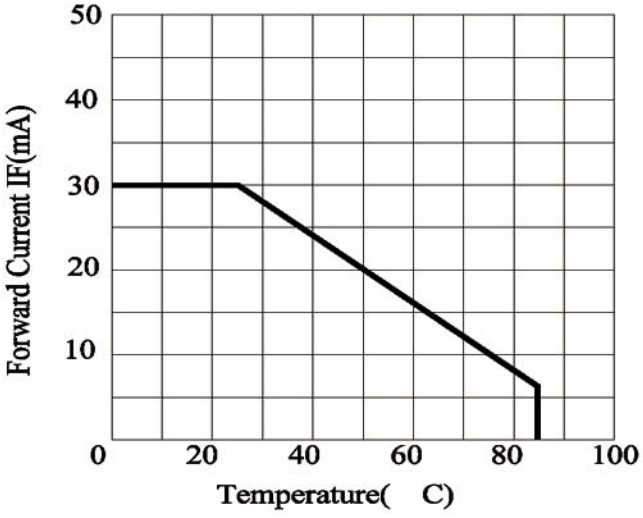
WHITE LED SPECTRUM VS. WAVELENGTH



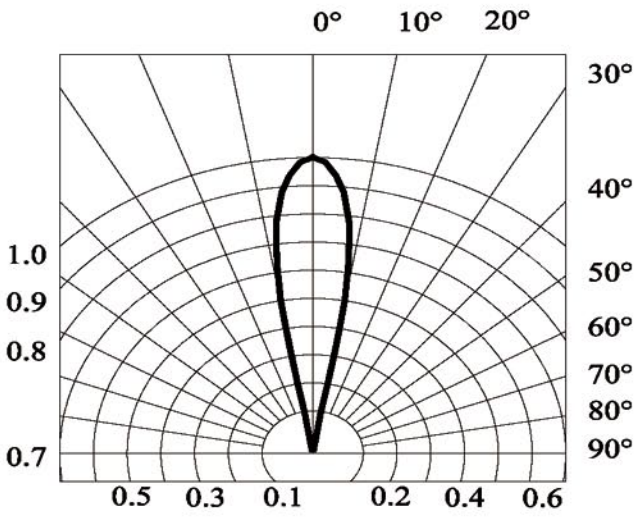
FORWARD CURRENT VS.APPLIED VOLTAGE



FORWARD CURRENT VS. LUMINOUS INTENSITY



FORWARD CURRENT VS. AMBIENT TEMPERATURE



RADIATION DIAGRAM