

PRELIMINARY SPEC



ATTENTION

**OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES**

Part Number: WP154A4QBESEGZGC/CA

Blue
Hyper Orange
Green

Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- I.C.COMPATIBLE.
- LONG LIFE-SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

Description

The Blue source color devices are made with AlInGaN on Sapphire Light Emitting Diode.

The Hyper Orange source color devices are made with InGaAlP on GaAs substrate Light Emitting Diode.

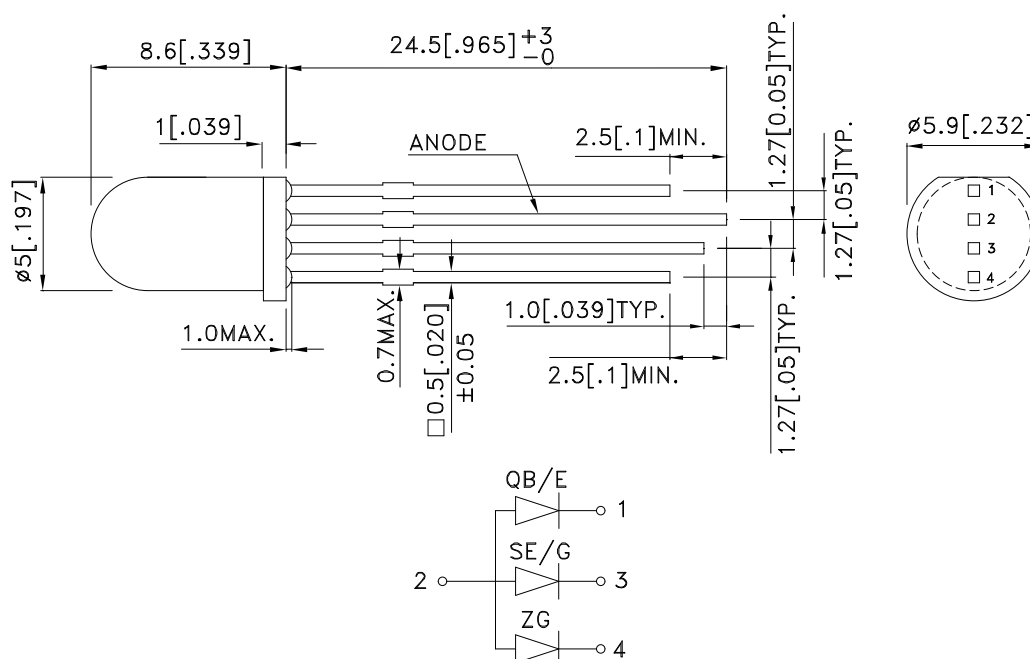
The Green source color devices are made with AlInGaN on Sapphire Light Emitting Diode.

Static electricity and surge damage the LEDS.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2]@ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
WP154A4QBESEGZGC/CA	Blue (AlInGaN)	WATER CLEAR	380	950	50°
	Hyper Orange (InGaAlP)		50	150	
	Green (AlInGaN)		900	2000	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue Hyper Orange Green	468 630 515		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue Hyper Orange Green	470 625 525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue Hyper Orange Green	25 20 30		nm	IF=20mA
C	Capacitance	Blue Hyper Orange Green	100 20 45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue Hyper Orange Green	3.3 1.9 3.3	4 2.5 4.1	V	IF=20mA
IR	Reverse Current	Blue Hyper Orange Green		10 10 10	uA	VR=5V

Notes:

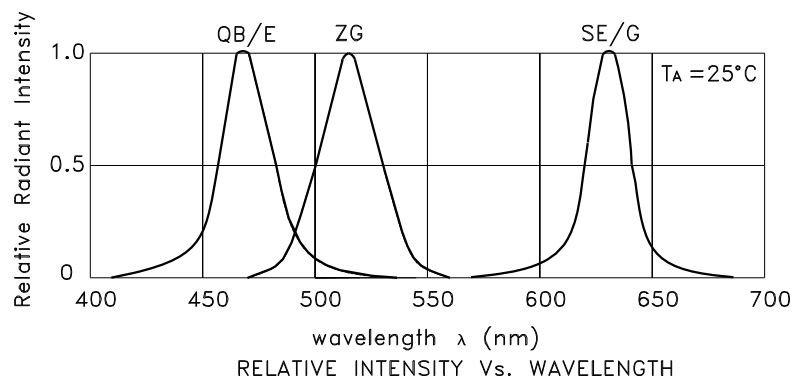
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

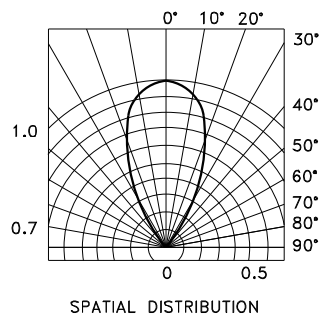
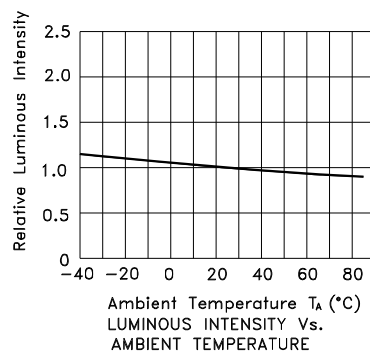
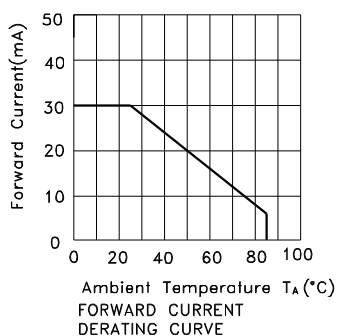
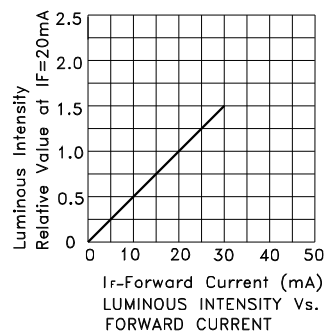
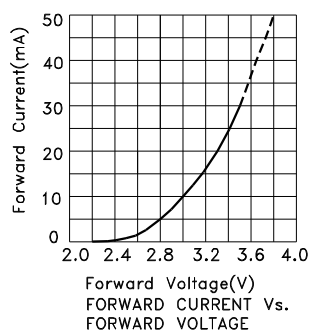
Parameter	Blue	Hyper Orange	Green	Units
Power dissipation	120	75	102.5	mW
DC Forward Current	30	30	25	mA
Peak Forward Current [1]	150	200	150	mA
Reverse Voltage	5			V
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

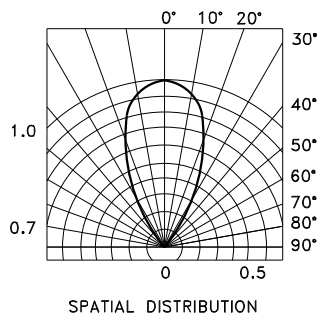
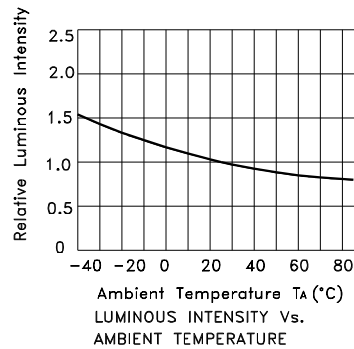
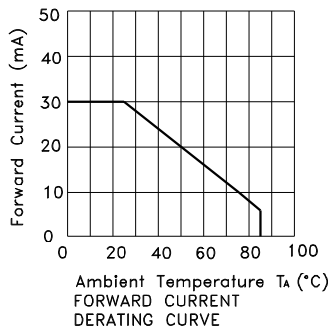
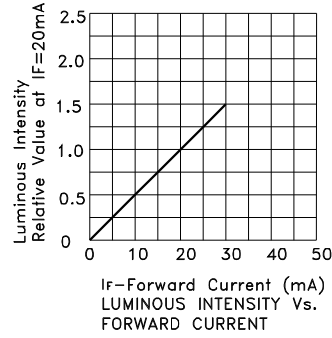
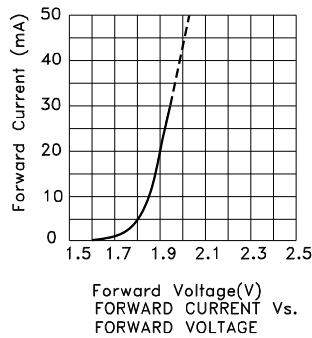
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



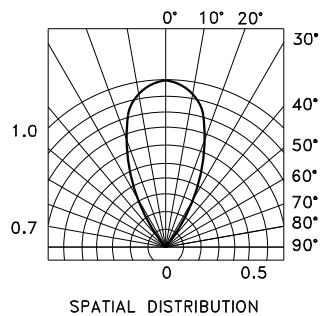
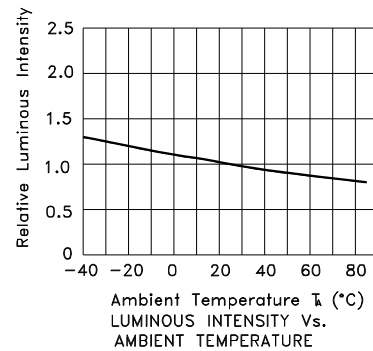
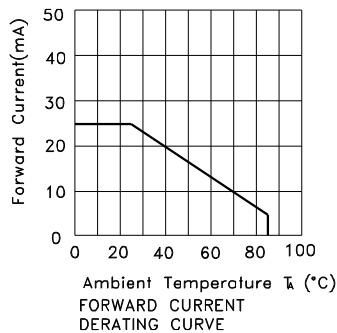
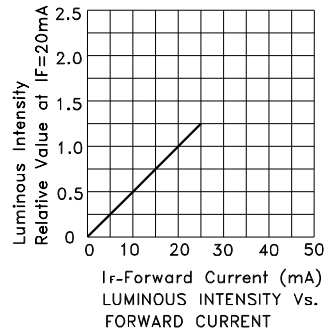
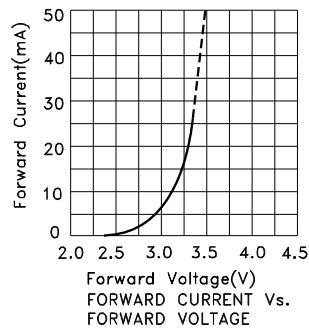
WP154A4QBESEGZGC/CA Blue



Hyper Orange

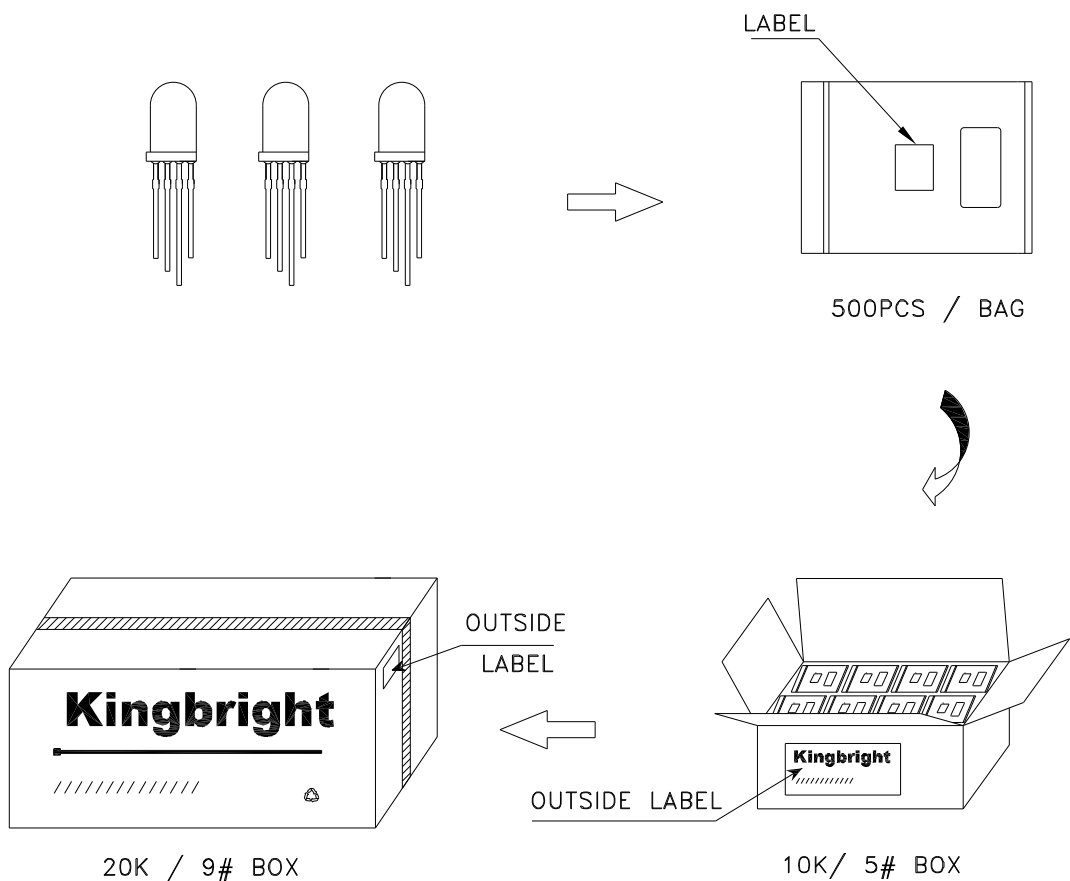


Green



PACKING & LABEL SPECIFICATIONS

WP154A4QBESEGZGC/CA



Kingbright	
Q.C.	
TYPE NO : WP154A4xxx	
QUANTITY : 500 pcs	
S/N : XX	CODE: XX
LOT NO : 	
RoHS Compliant	