

PRELIMINARY SPEC



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: AAF5060PBESEEVGA

BLUE
HYPER ORANGE
GREEN

Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- WATER CLEAR LENS.
- LOW POWER CONSUMPTION.
- ONE BLUE, ONE ORANGE AND ONE GREEN CHIPS IN ONE PACKAGE.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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

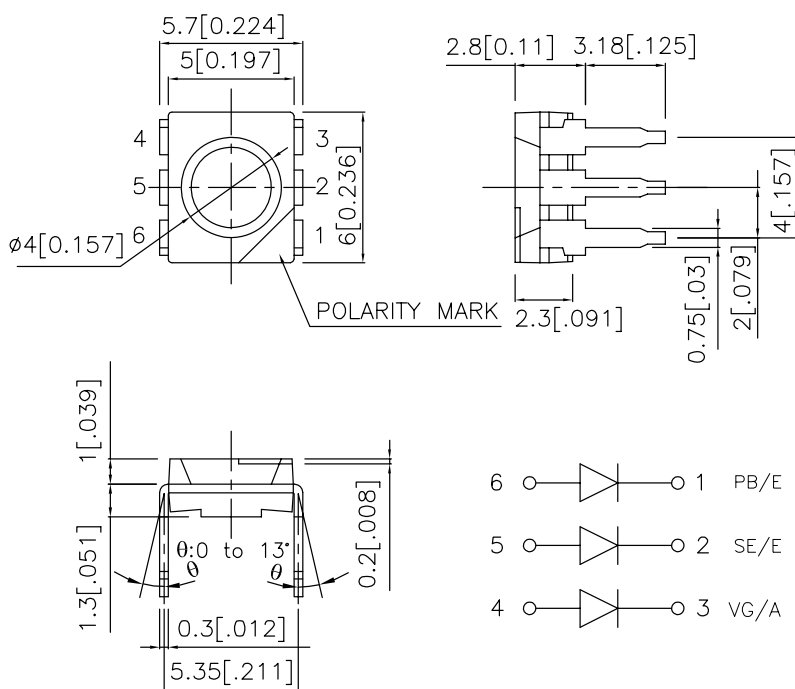
The Green source color devices are made with InGaN on G-SiC Light Emitting Diode.

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 package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @30mA *50mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
AAF5060PBESEEVGA	BLUE (InGaN)	WATER CLEAR	110	250	100°
	HYPER ORANGE(InGaAlP)		*650	*1000	
	GREEN (InGaN)		180	350	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. *Luminous intensity with asterisk is measured at 50mA; 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	465 630 520		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue Hyper Orange Green	470 621 525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue Hyper Orange Green	25 20 35		nm	IF=20mA
C	Capacitance	Blue Hyper Orange Green	110 25 100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue Hyper Orange Green	3.7 2.0 3.2	4.3 2.5 4.0	V	IF=20mA
IR	Reverse Current	Blue Hyper Orange Green		10 10 10	uA	VR = 5V

Notes:

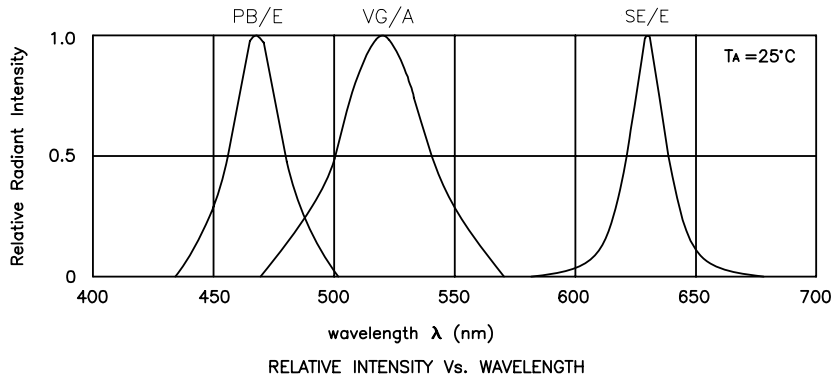
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

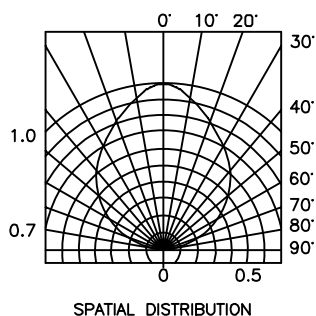
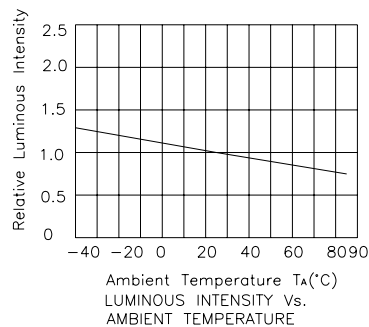
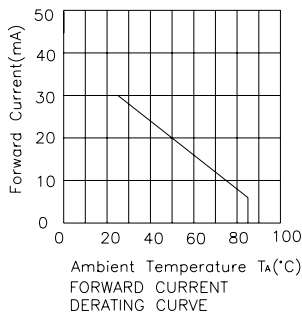
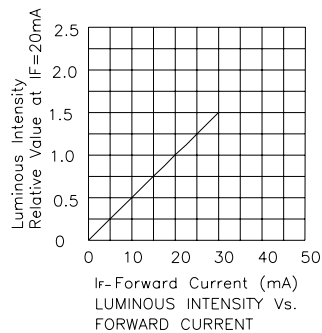
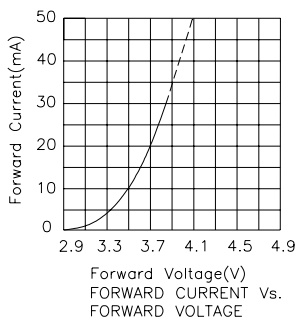
Parameter	Blue	Hyper Orange	Green	Units
Power dissipation [1]	350			mW
DC Forward Current	30	50	50	mA
Peak Forward Current [2]	160	195	100	mA
Reverse Voltage	5	5	5	V
Operating / Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [3]	260°C For 3 Seconds			
Lead Solder Temperature [4]	260°C For 5 Seconds			

Notes:

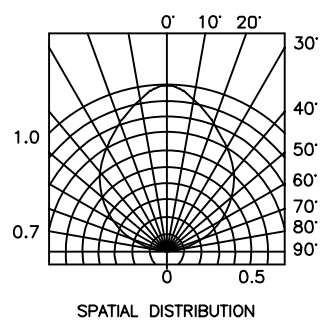
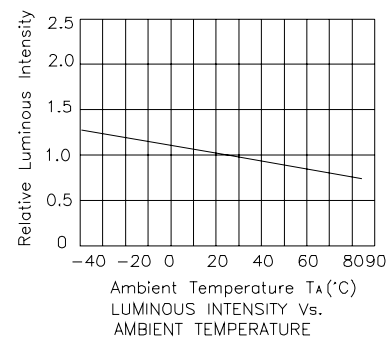
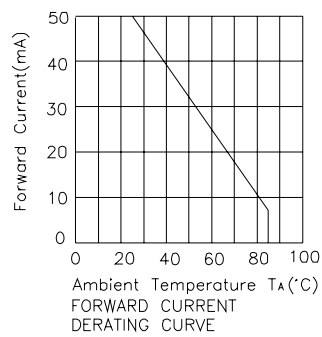
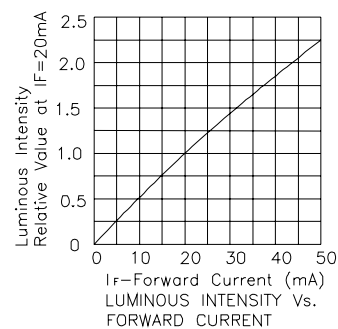
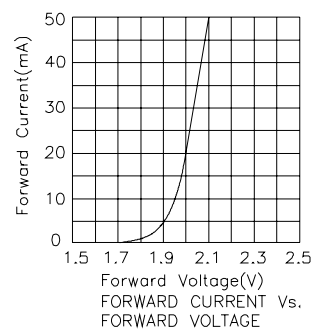
1. Within 350mW at all chips are lightened.
2. 1/10 Duty Cycle, 0.1ms Pulse Width.
3. 2mm below package base.
4. 5mm below package base.



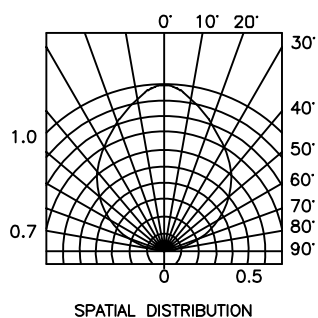
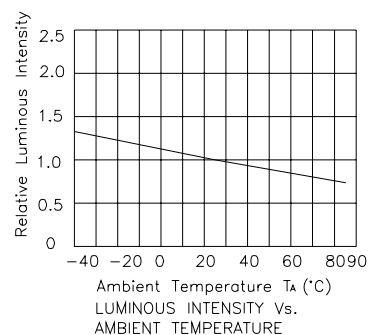
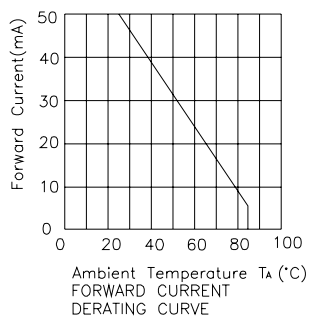
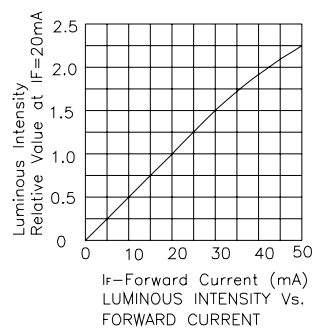
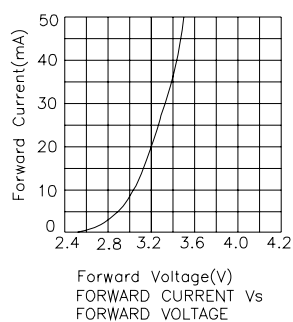
AAF5060PBESEEVGA
Blue



Hyper Orange

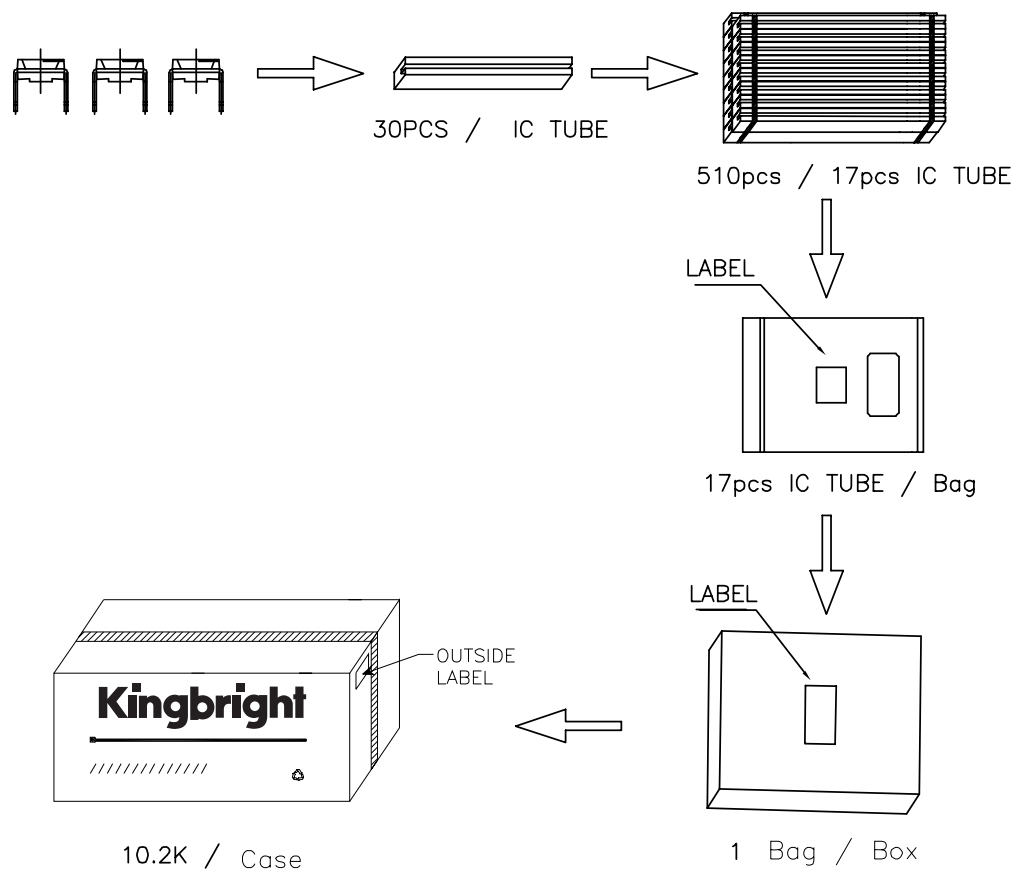



Green



PACKING & LABEL SPECIFICATIONS

AAF5060PBESEEVGA



Kingbright	
P/NO: AAF5060xxx	
QTY: 30 pcs	Q.C. Q C xx-xx-xxxx PASSED
S/N: XXXX	Date
CODE: XXX	
LOT NO:	
	
MADE IN CHINA	RoHS Compliant