

PRELIMINARY SPEC

Part Number: AAAF5060QBDZGSEEC



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Blue
Green
Hyper Red

Features

- Chips can be controlled separately.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

Description

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

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

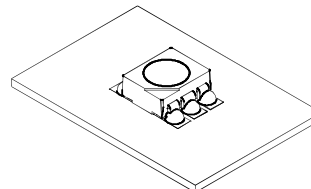
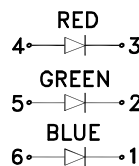
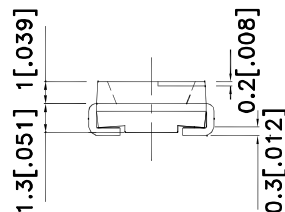
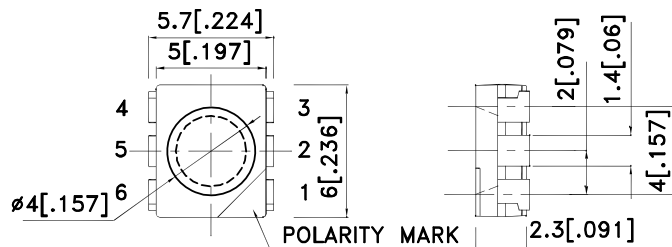
The Hyper Red source color devices are made with Al-GaInP on GaAs substrate Light Emitting Diode.

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. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 30mA *50mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
AAAF5060QBDZGSEEC	Blue (AlGaInN)	WATER CLEAR	110	250	100°
	Green (InGaN)		280	650	
	Hyper Red (AlGaInP)		*650	*1000	

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 Green Hyper Red	468 515 630		nm	I _F =20mA
λD [1]	Dominant Wavelength	Blue Green Hyper Red	470 525 621		nm	I _F =20mA
Δλ1/2	Spectral Line Half-width	Blue Green Hyper Red	25 30 20		nm	I _F =20mA
C	Capacitance	Blue Green Hyper Red	100 45 25		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue Green Hyper Red	3.3 3.3 2	4 4.1 2.5	V	I _F =20mA
I _R	Reverse Current	Blue Green Hyper Red		10 10 10	uA	V _R =5V

Notes:

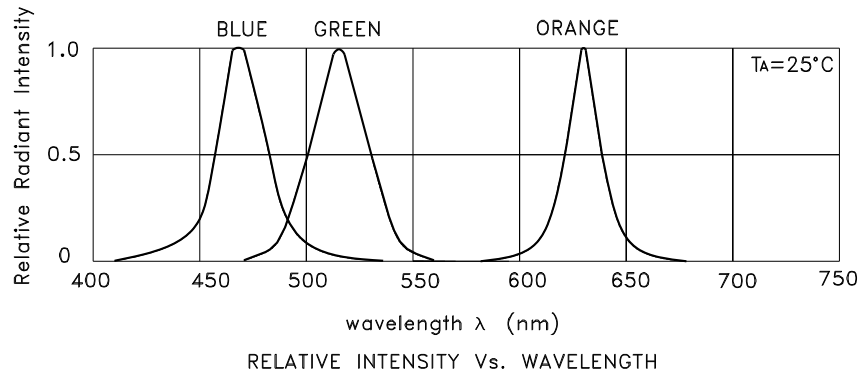
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

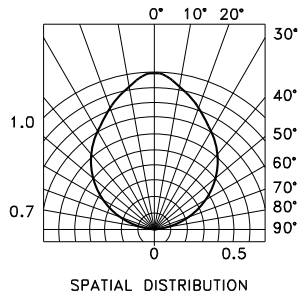
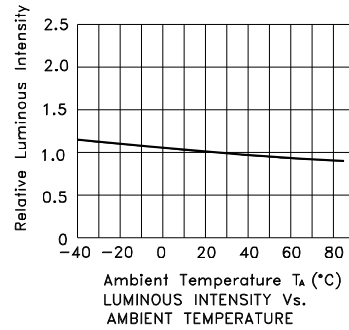
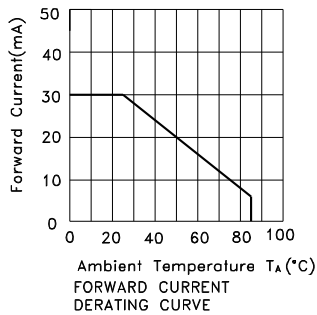
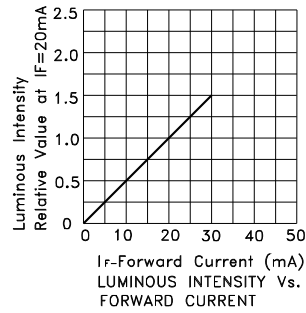
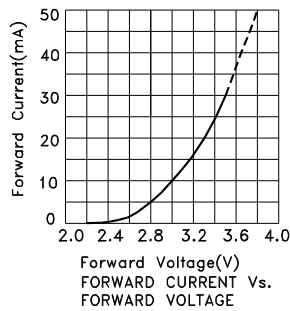
Parameter	Blue	Green	Hyper Red	Units
Power dissipation[2]	350			mW
DC Forward Current	30	30	50	mA
Peak Forward Current [1]	150	150	195	mA
Reverse Voltage	5			V
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Within 350mW at all chips are lightened.

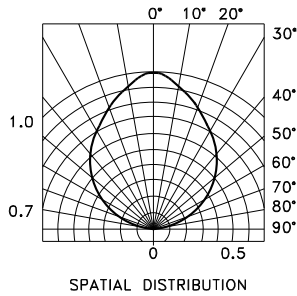
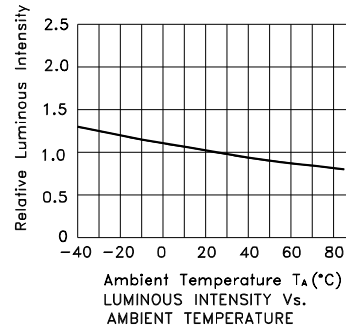
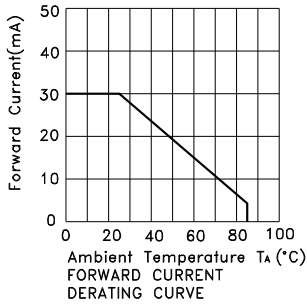
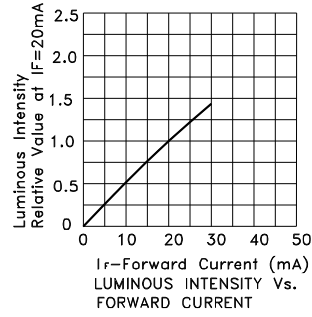
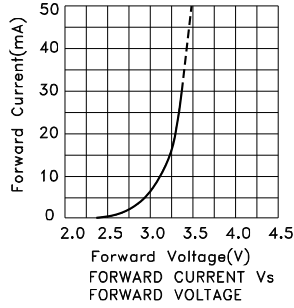


AAAF5060QBDZGSEEC Blue



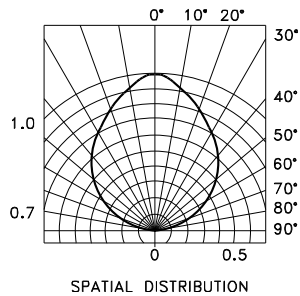
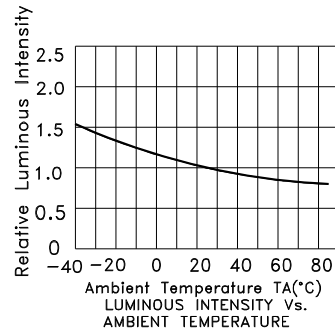
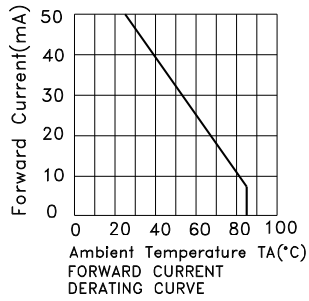
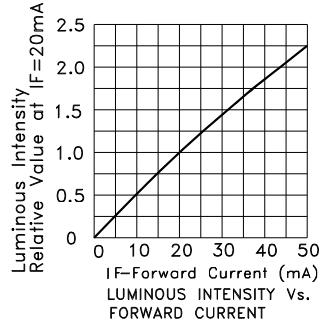
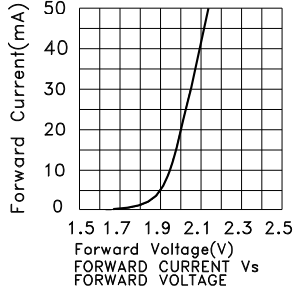
Kingbright

Green



Kingbright

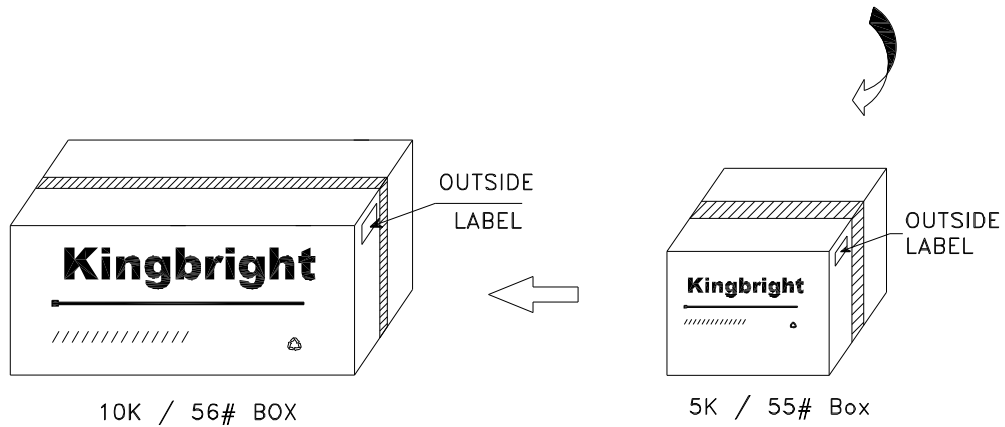
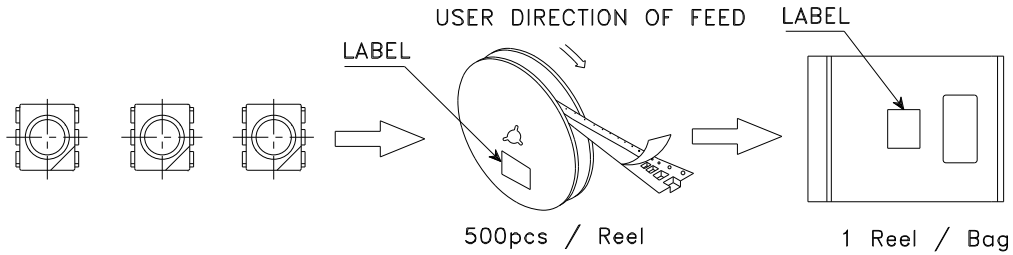
Hyper Red




Kingbright

PACKING & LABEL SPECIFICATIONS

AAAF5060QBDZGSEEC



Kingbright	
P/NO: AAAF5060xxx	
QTY: 500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	