



ATTENTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

AAA5060SEEVGPBE

HYPER ORANGE / GREEN / BLUE

Features

- CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 500PCS / REEL.

Description

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 SiC Light Emitting Diode.

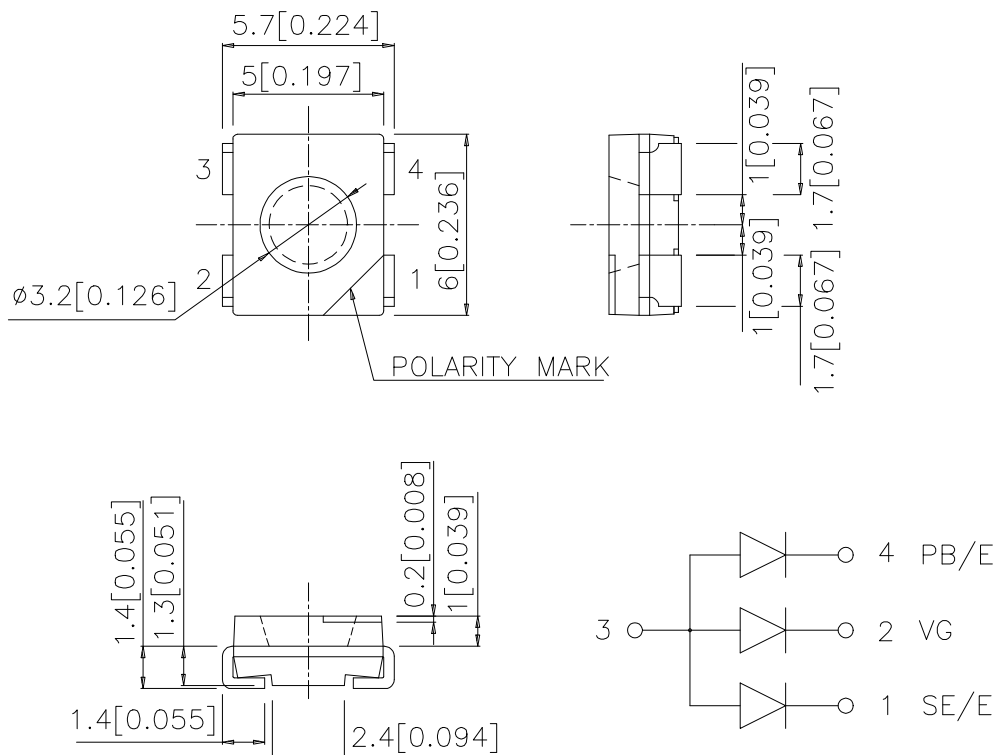
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 50mA *30mA		Viewing Angle
			Min.	Typ.	
AAA5060SEEVGPBE	HYPER ORANGE(InGaAlP)	WATER CLEAR	650	1000	100°
	GREEN (InGaN)		*180	*350	
	BLUE (InGaN)		*110	*250	

Note:

1. $\theta 1/2$ 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 30mA.

Electrical / Optical Characteristics at T_A=25°C

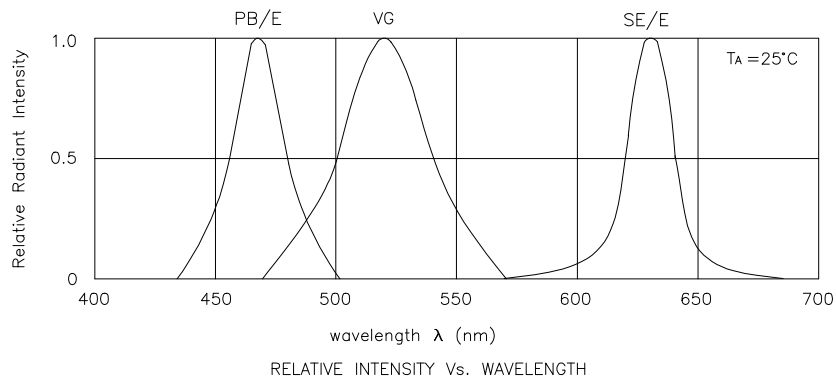
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Orange Green Blue	630 520 465		nm	I _F =20mA
λ_D	Dominate Wavelength	Hyper Orange Green Blue	621 525 470		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Orange Green Blue	20 38 25		nm	I _F =20mA
C	Capacitance	Hyper Orange Green Blue	25 45 110		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Hyper Orange Green Blue	2 4.0 3.7	2.5 4.5 4.3	V	I _F =20mA
I _R	Reverse Current	All		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Hyper Orange	Green	Blue	Units
Total Power dissipation [1]	350			mW
DC Forward Current	50	30	30	mA
Peak Forward Current [2]	195	150	160	mA
Reverse Voltage	5			V
Operating/Storage Temperature	-40°C To +85°C			

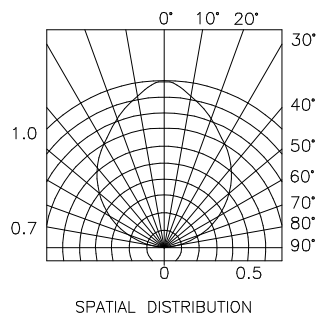
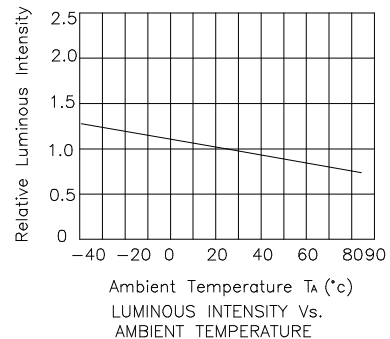
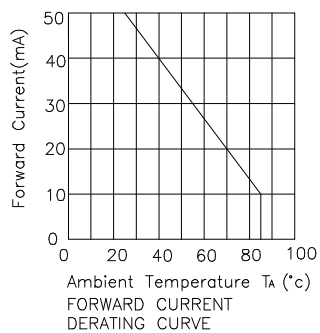
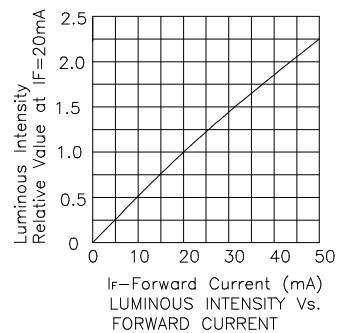
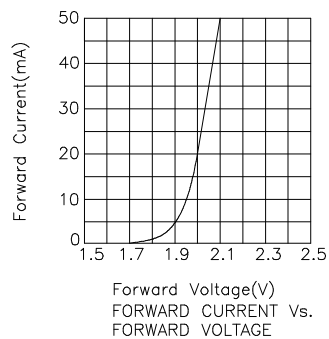
Notes:

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

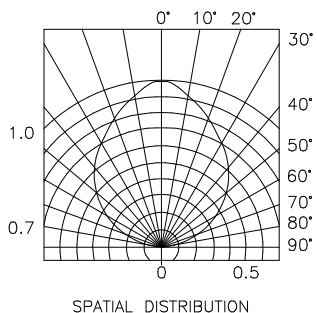
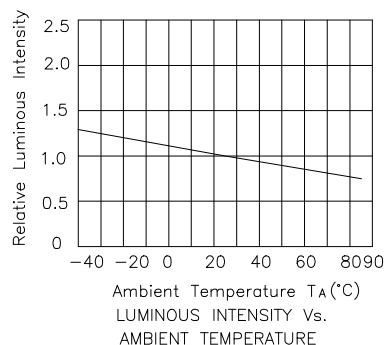
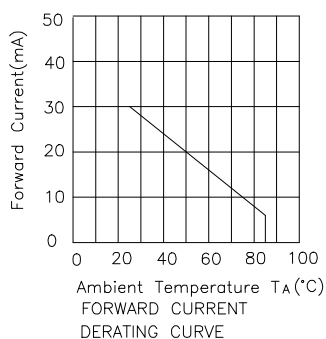
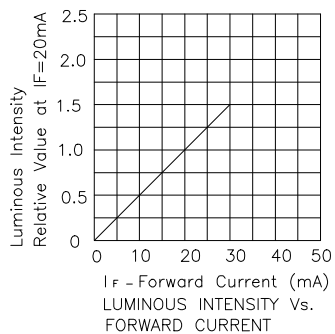
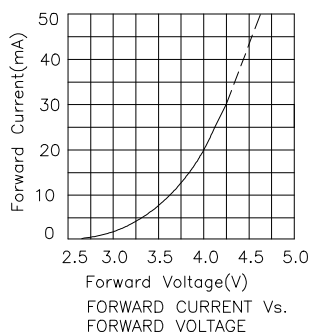


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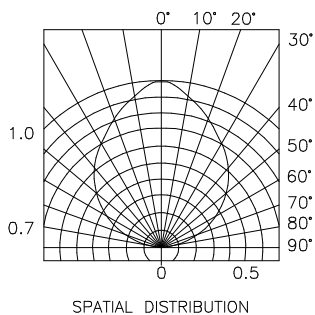
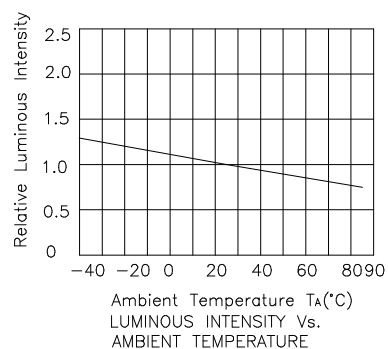
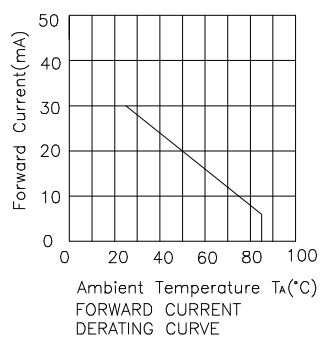
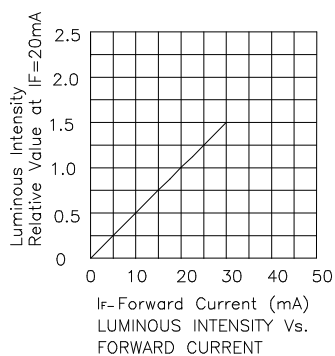
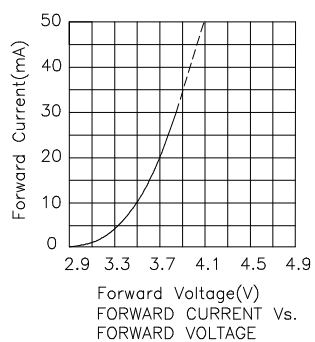
Hyper Orange



Green



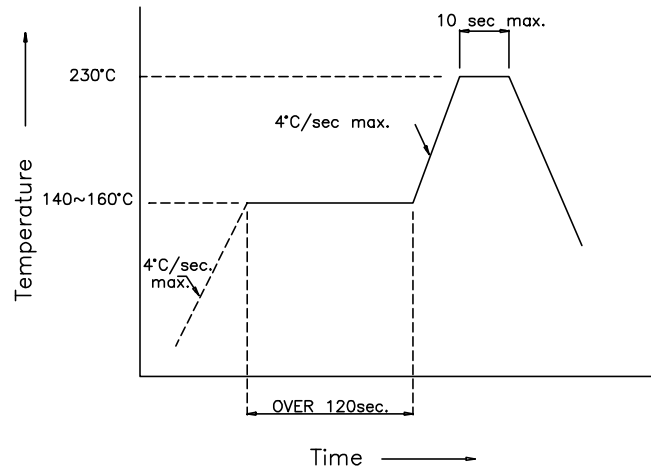
Blue



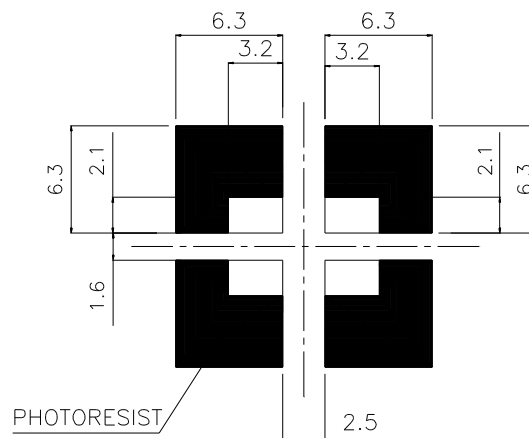
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SMT Reflow Soldering Instruction

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)

