PRELIMINARY SPEC



ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

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.

5.0mm x 6.0mm SURFACE MOUNT LED LAMP

Part Number: AAAF5060QBFSEEZGC

Blue Hyper Red Green

Description

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

The Hyper Red source color devices are made with

AlGaInP on GaAs substrate Light Emitting Diode.

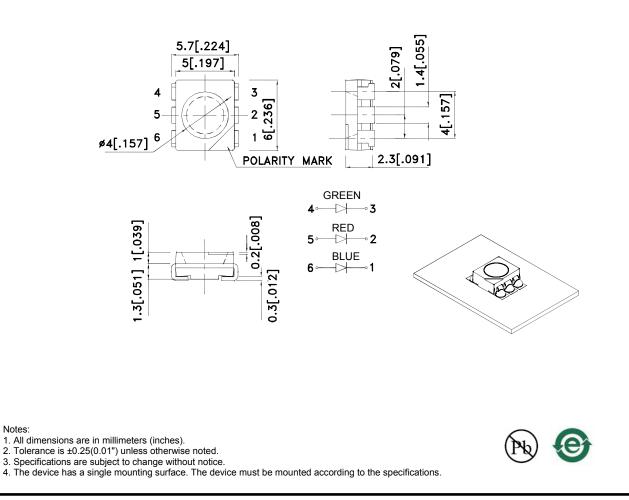
The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.

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.





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Selection Guide								
Part No.	Dice	Lens Type	lv (mcd) [2] @ 30mA *50mA		Viewing Angle [1]			
			Min.	Тур.	201/2			
AAAF5060QBFSEEZGC	Blue (InGaN)		180	350	100°			
	Hyper Red (AlGaInP)	WATER CLEAR	*650	*1000				
	Green (InGaN)		280	650				

Notes:

θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
*Luminous intensity with asterisk is measured at 50mA; Luminous intensity/ luminous Flux: +/-15%.

Lieundar optical onaracteristics at TA-200								
Symbol	Parameter	Device	Тур.	Max.	Units	ts Test Conditions		
λpeak	Peak Wavelength	Blue Hyper Red Green	461 630 515		nm	I⊧=20mA		
λD [1]	Dominant Wavelength	Blue Hyper Red Green	465 621 525		nm	I⊧=20mA		
Δλ1/2	Spectral Line Half-width	Blue Hyper Red Green	25 20 30		nm	IF=20mA		
С	Capacitance	Blue Hyper Red Green	100 25 45		pF	VF=0V;f=1MHz		
Vf [2]	Forward Voltage	Blue Hyper Red Green	3.3 2 3.3	4 2.5 4.1	V	IF=20mA		
lr	Reverse Current	Blue Hyper Red Green		10 10 10	uA	VR=5V		

Electrical / Optical Characteristics at TA=25°C

Notes:

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

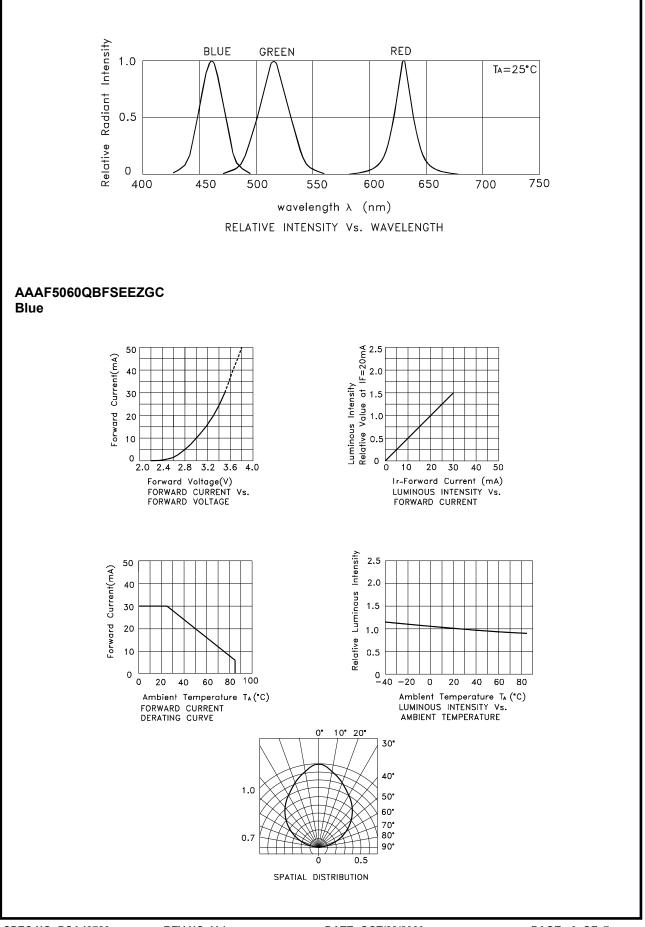
Absolute Maximum Ratings at TA=25°C

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

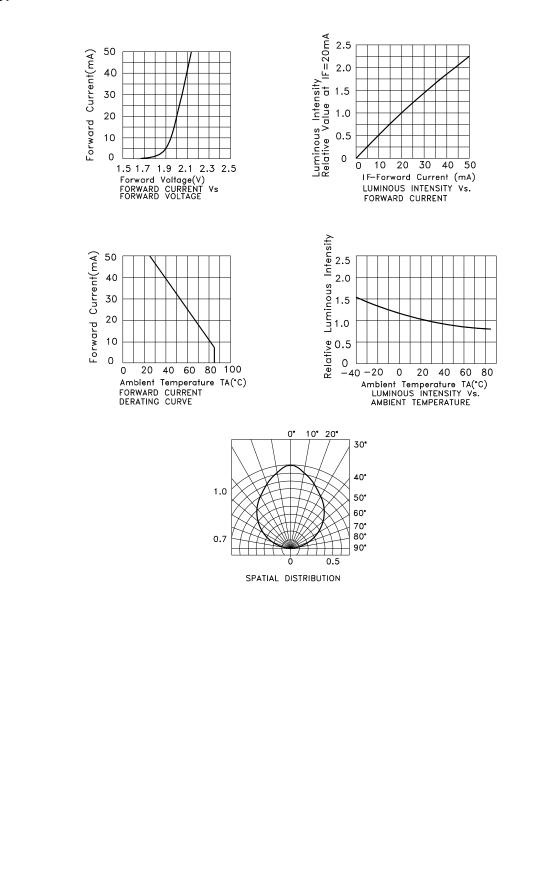
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

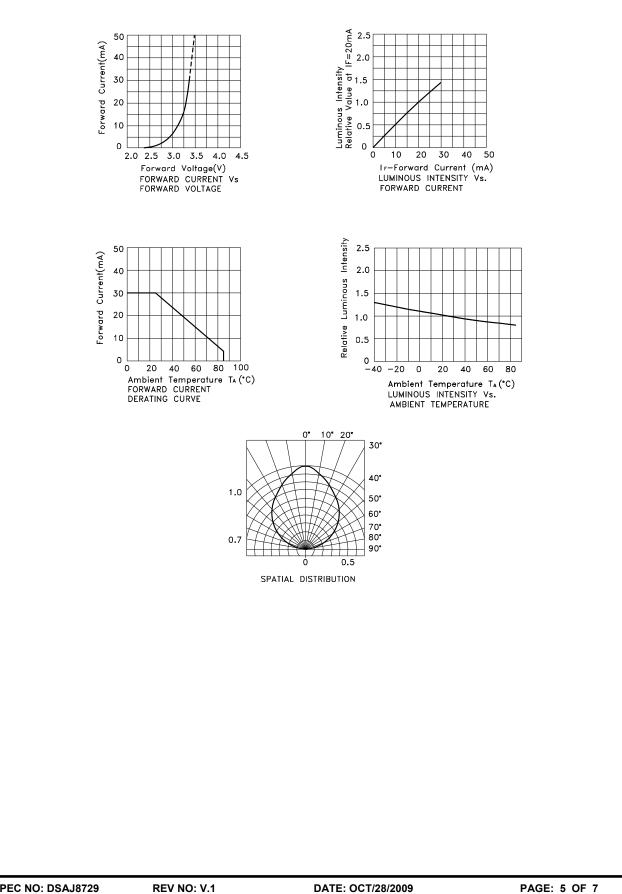
2. Within 350mW at all chips are lightened.



Hyper Red

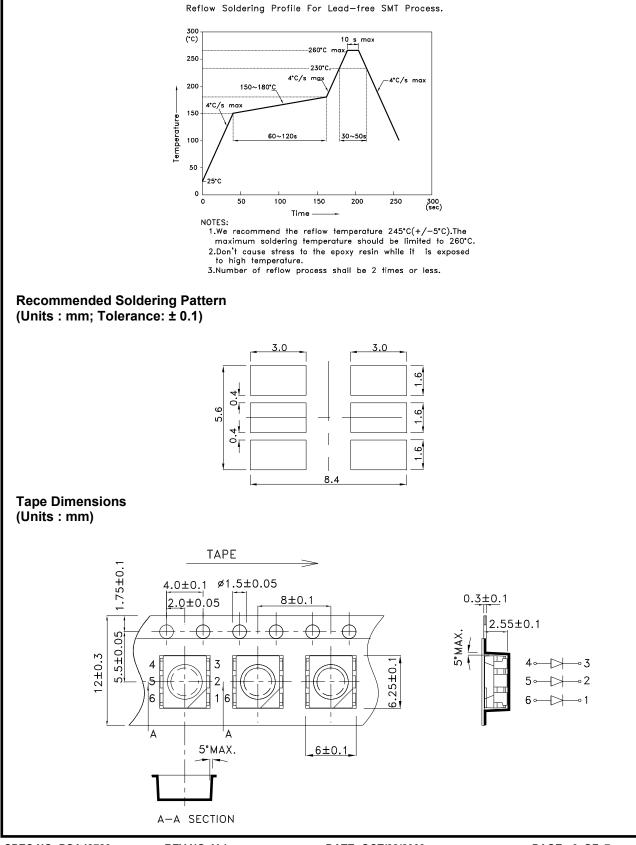






AAAF5060QBFSEEZGC

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.



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