



## Wah Wang Data Sheet for 5mm Super Blue LED

5A3 Series

Angle: 35°

Class: Q

Part No: WW05A3SBQ4-B1



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**S.D.N. or D.N. No.** : \_\_\_\_\_

**Customer Name** : \_\_\_\_\_

**Sample Approval Signature** : \_\_\_\_\_

**Date** : \_\_\_\_\_



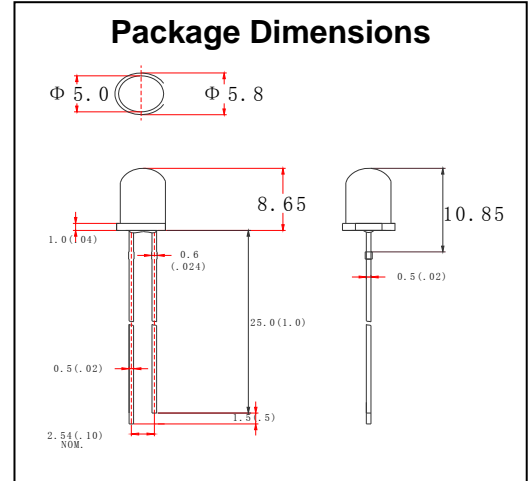
## Wah Wang Data Sheet For 5mm Super Blue LED – 5A3 Series Angle 35° Class: Q

### Features

- Standard T-1 Diameter Type Package.
- General Purpose Leads
- Reliable and Rugged

### Absolute Maximum Ratings at Ta=25°C

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current ( $\leq 1/10$ Duty Cycle, 0.1ms Pulse Wide)	100	mA
Continuous Forward Current	20	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +65°C	
Storage Temperature Range	-40°C to +80°C	
Lead Soldering Temperature [3mm(From solder joint to epoxy body)]	260°C for 3 Seconds	



### Electrical Optical Characteristics at Ta=25°C

Part Number	Lens color	Source Color	Luminous Intensity Iv / mcd I <sub>F</sub> = 20mA (Note 5)			Dominant Wavelength $\lambda_d$ / nm I <sub>F</sub> = 20mA (Note8)			Forward Voltage / V I <sub>F</sub> = 20mA			Viewing Angle / Deg (Note 6)
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
WW05A3SBQ4-B1	Water Clear	Blue	3700	4900	---	465	---	475	2.8	---	3.4	35°
Reverse Voltage = 5V						Reverse Current $\leq 5\mu\text{A}$						

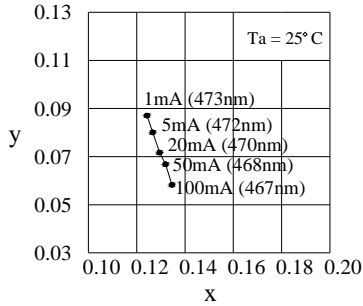
### Notes:

1. All dimensions are in millimeter.
2. Tolerance of measurement is  $\pm 0.25\text{mm}$  (.01") unless others otherwise noted.
3. Protruded resin under flanges is 1.0mm(0.4") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve. Tolerance of measurement of luminous intensity is  $\pm 15\%$
6.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity. It use many parameters that correspond to the CIE 1931 2° Tolerance of measurement of angle is  $\pm 5$  degree
7. Caution in ESD: Static Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.
8. X,Y, and Z are CIE1931 2° values of Red, Green and Blue content of the measurement. Color Coordinates Measurement allowance is  $\pm 0.01$
9. Specifications are subject to change without notice.

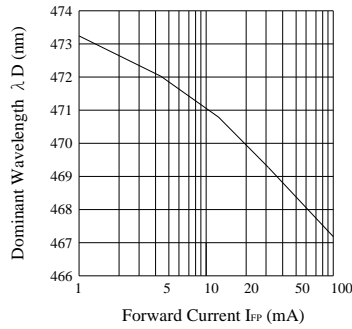


## Typical Characteristic for Super Bright Blue LED

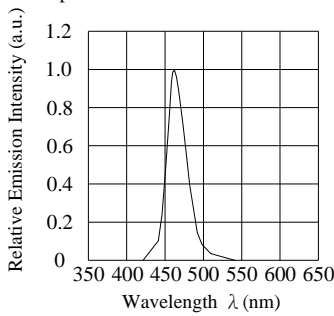
Forward Current vs. Chromaticity Coordinate ( $\lambda$  D)



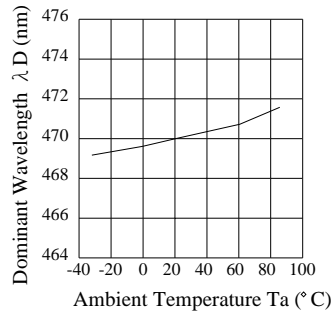
Forward Current vs. Dominant Wavelength



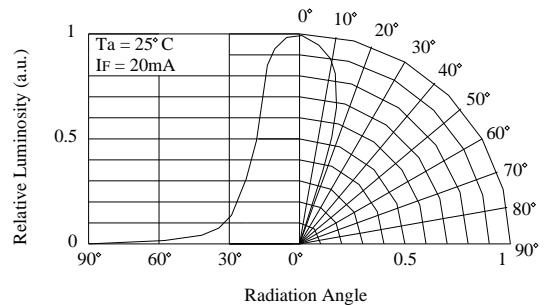
Spectrum



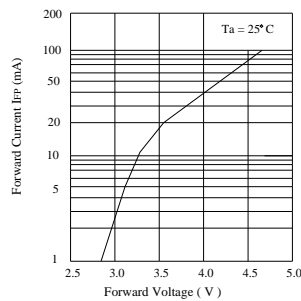
Ambient Temperature vs. Dominant Wavelength



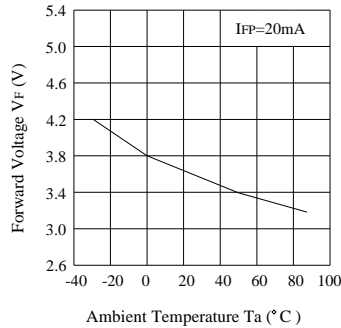
Directivity (Angle : 35°)



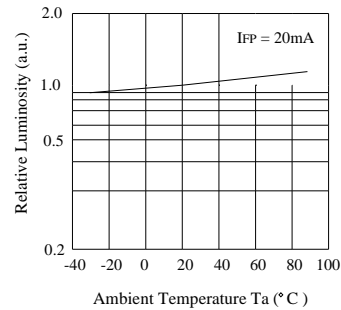
Forward Voltage vs. Forward Current



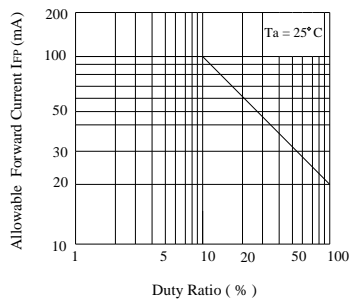
Ambient Temperature vs. Forward Voltage



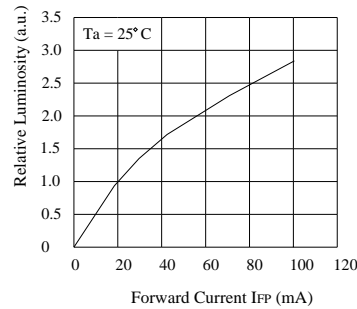
Ambient Temperature vs. Relative Luminosity



Duty Ratio vs. Allowable Forward Current



Forward Current vs. Relative Luminosity



Ambient Temperature vs. Allowable Forward Current

