

#### SUBMINIATURE SOLID STATE LAMP

Part Number: AM2520QBC/D09 Blue



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

#### **Features**

- Subminiature package.
- Z-bend lead.
- Long life solid state reliability.
- Low package profile.
- Moisture sensitivity level : level 3.
- Package: 1000pcs / reel.
- RoHS compliant.

#### Description

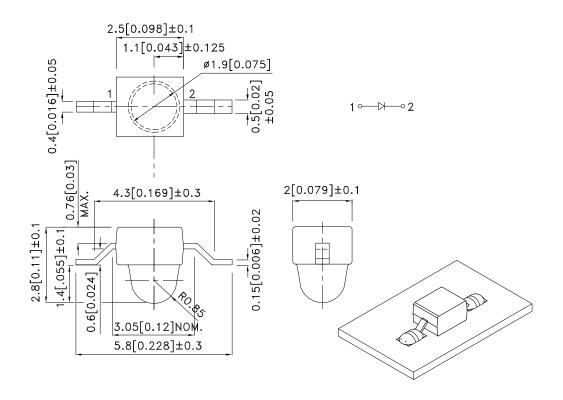
The Blue source color devices are made with InGaN Light Emitting Diode.

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:

- 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 the package.
- 4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
- 5. The device has a single mounting surface. The device must be mounted according to the specifications.

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 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: J.Yu
 ERP: 1202000592

### **Selection Guide**

Part No.	Dice Lens Type		lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
AM2520QBC/D09	Blue (InGaN)	Water Clear	350	600	20°

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value. 2. Luminous intensity/ luminous Flux: +/-15%.

### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	468		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	25		nm	I=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.3	4	V	IF=20mA
lR	Reverse Current	Blue		50	uA	V <sub>R</sub> =5V

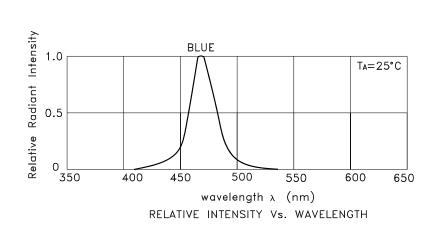
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

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

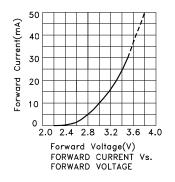
Parameter	Blue	Units		
Power dissipation	120	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	150	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

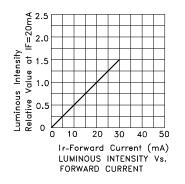
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

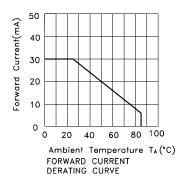
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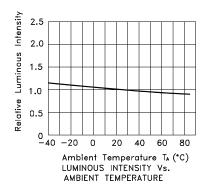


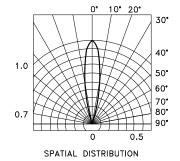
Blue AM2520QBC/D09











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#### AM2520QBC/D09

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.

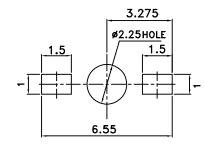
Reflow Soldering Profile For Lead-free SMT Process.



- NOTES: 1.We recommend the reflow temperature 245°C( $\pm$ /-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

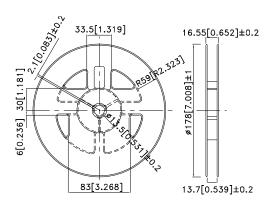
  3.Number of reflow process shall be 2 times or less.

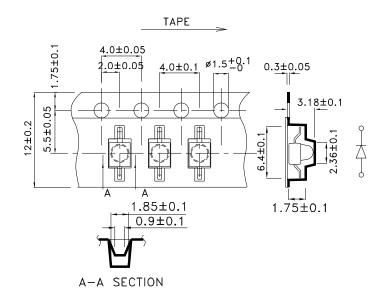
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



**Tape Dimensions** (Units: mm)

#### **Reel Dimension**

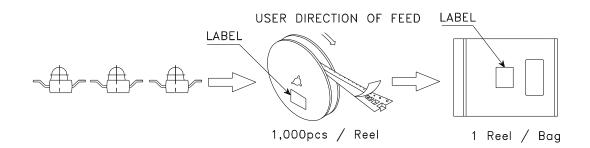


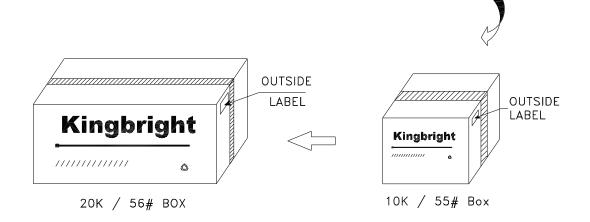


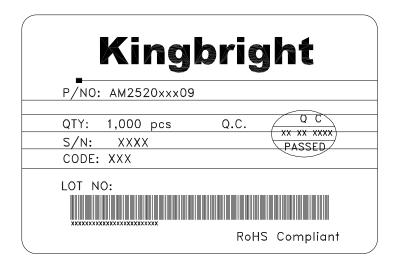
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### PACKING & LABEL SPECIFICATIONS

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