

Kingbright

SUBMINIATURE SOLID STATE LAMP

PRELIMINARY SPEC

Part Number: AM2520ZGC03

Green



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

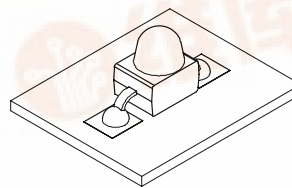
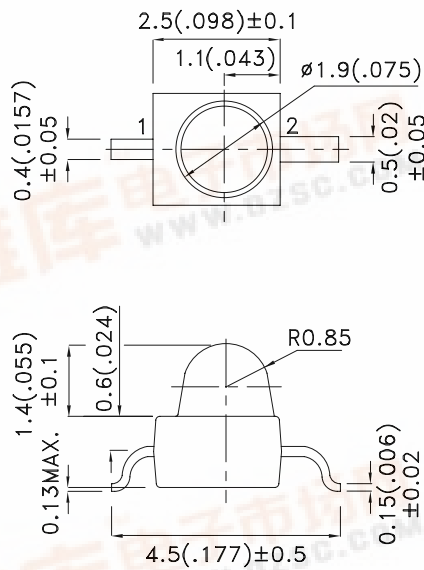
Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- GULL WING LEAD.
- LONG LIFE - SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- PACKAGE : 1000PCS / REEL.
- RoHS COMPLIANT.

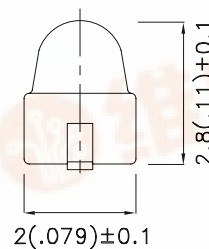
Description

The Green source color devices are made with AlInGaN 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.

Package Dimensions



1 —> 2



Notes:

1. 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. Specifications are subject to change without notice.
5. 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] @ 20mA		Viewing Angle [1]
			Min.	Typ.	θ1/2
AM2520ZGC03	Green (AlInGaN)	WATER CLEAR	1800	3300	20°

Notes:

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

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	515		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
C	Capacitance	Green	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.3	4.1	V	IF=20mA
IR	Reverse Current	Green		10	uA	VR=5V

Notes:

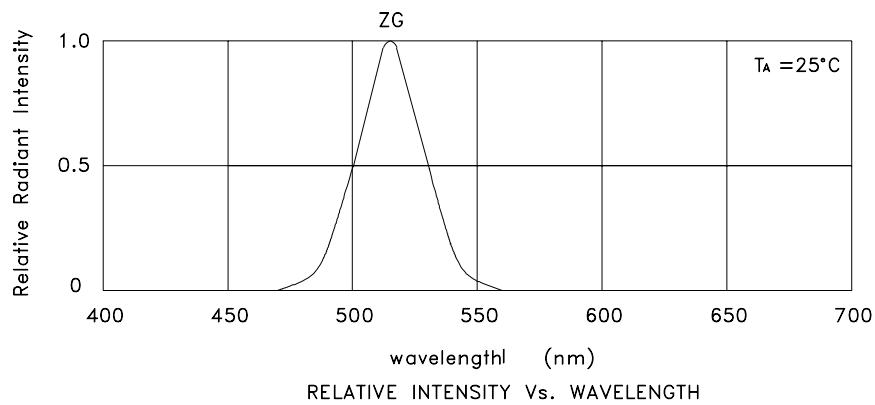
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units
Power dissipation	102.5	mW
DC Forward Current	25	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	

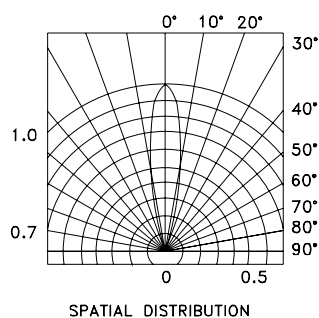
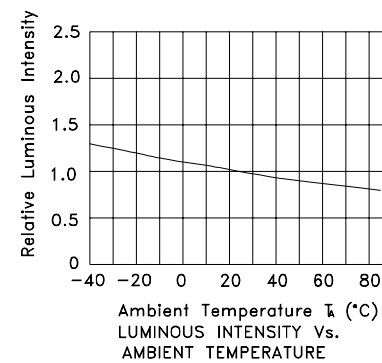
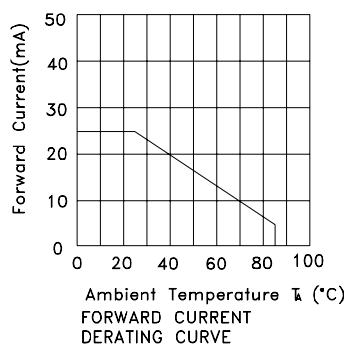
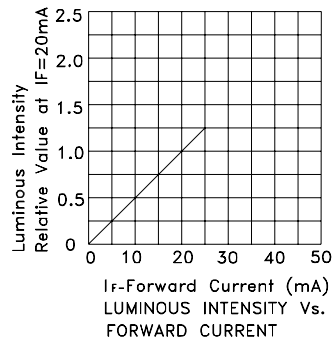
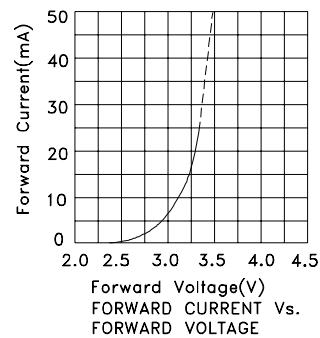
Note:

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



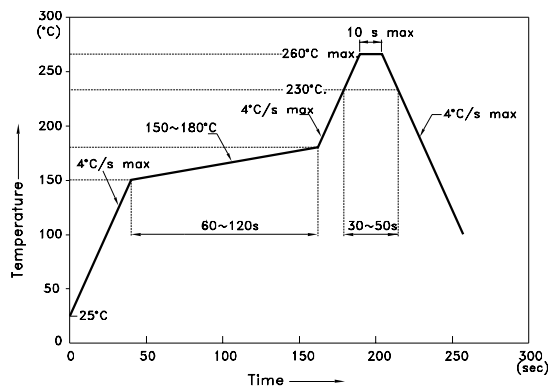
Green

AM2520ZGC03



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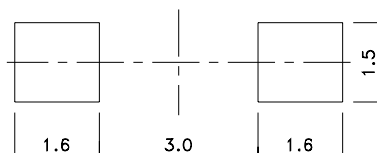
Reflow Soldering Profile For Lead-free SMT Process.



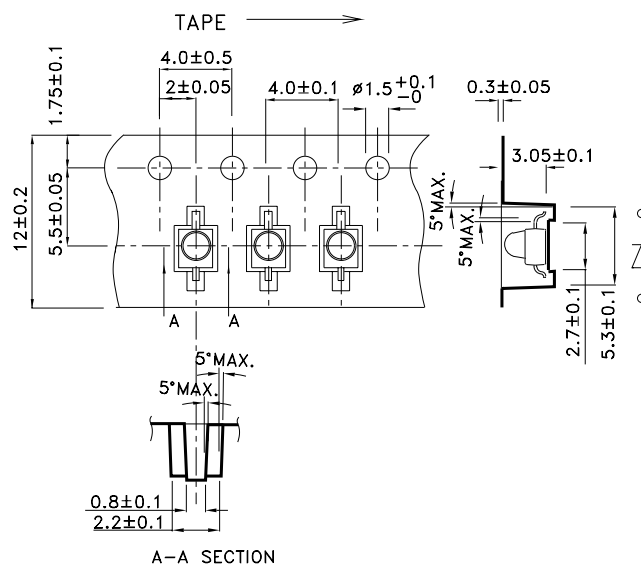
NOTES:

- NOTES:
- 1.We recommend the reflow temperature 245°C(+/-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)

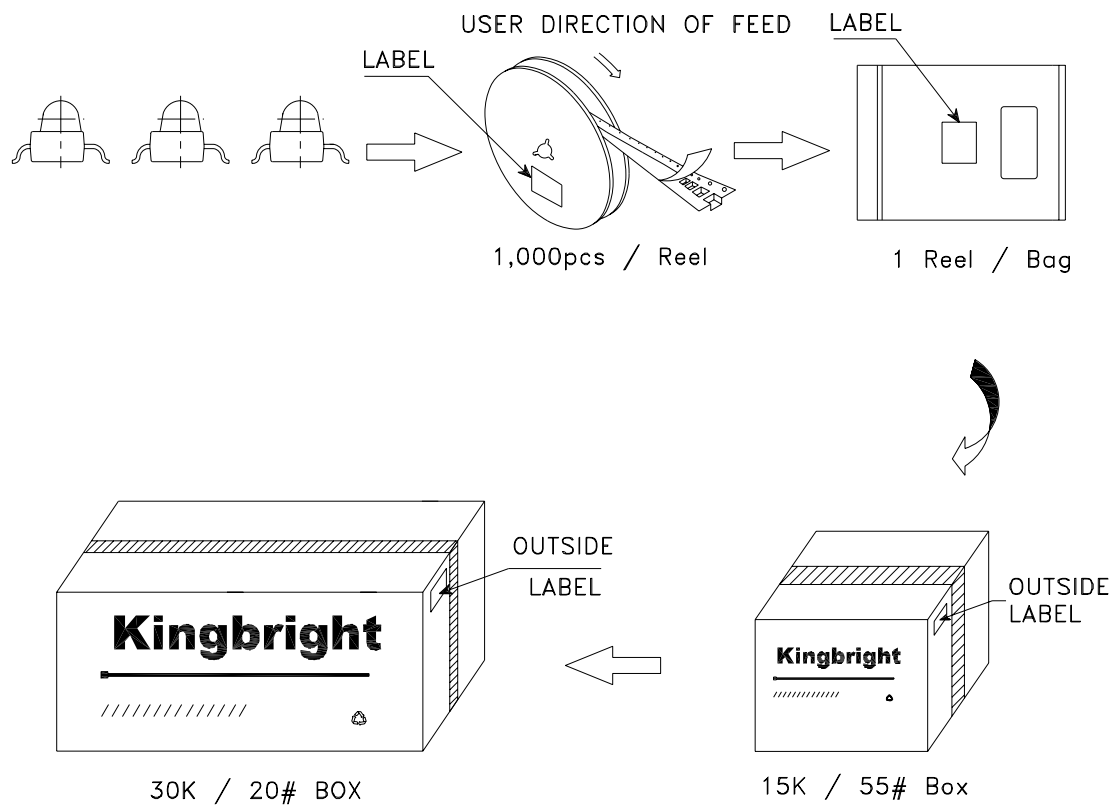


Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

AM2520ZGC03



Kingbright	
P/NO: AM2520xxx03	
QTY: 1,000 pcs	Q.C. Q C
S/N: XXXX	xx xx xxxx
CODE: XXX	PASSED
LOT NO:	
	
XXXXXXXXXXXXXXXXXXXX	
MADE IN CHINA	RoHS Compliant