

PRELIMINARY SPEC

Part Number: APED3820VGC/A-F01 Green



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

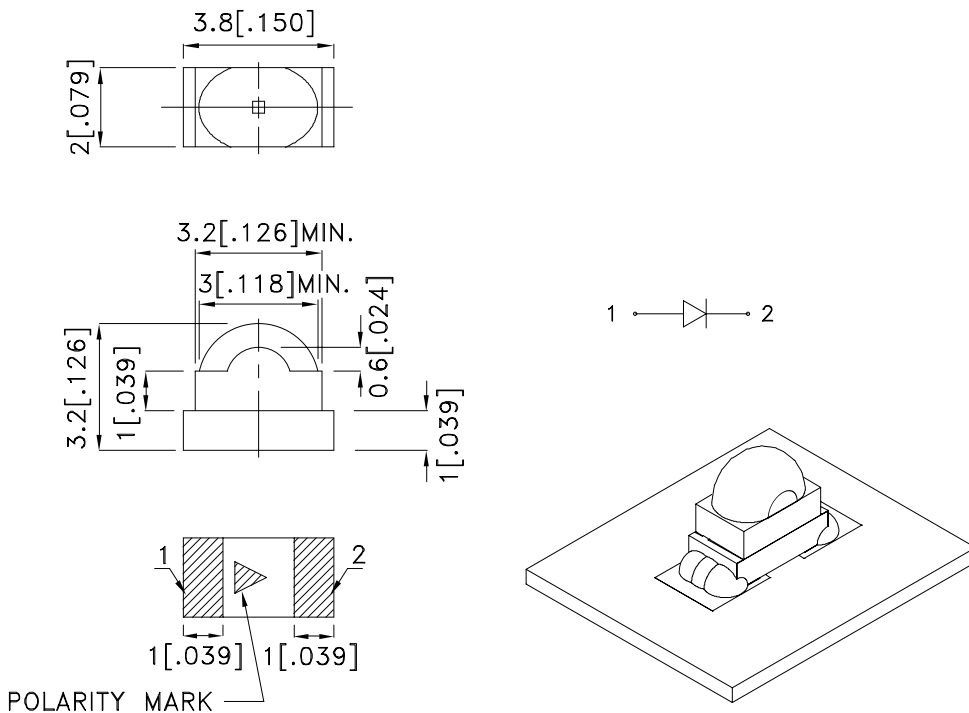
Features

- 3.8mmx2.0mm SMT LED, 3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.
- MOISTURE SENSIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

The Green source color devices are made with InGaN on G-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 ±0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.
4. 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.	2θ1/2
APED3820VGC/A-F01	Green (InGaN)	WATER CLEAR	180	450	60° (H) 35° (V)

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
λ_{peak}	Peak Wavelength	Green	520		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Green	525		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Green	35		nm	I _F =20mA
C	Capacitance	Green	100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Green	3.2	4	V	I _F =20mA
I _R	Reverse Current	Green		10	uA	V _R =5V

Notes:

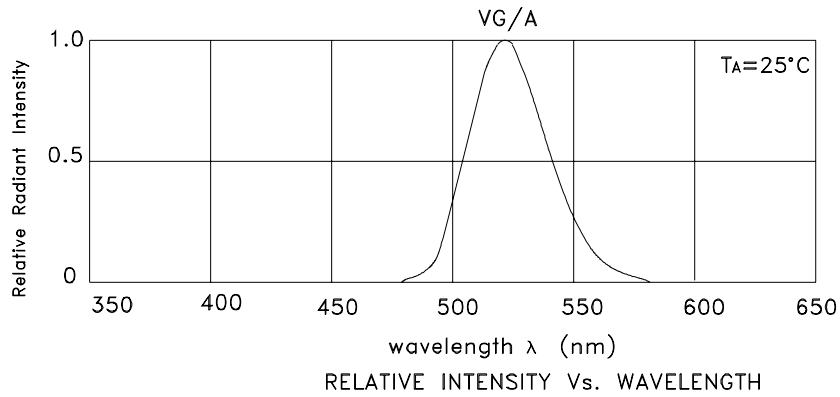
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

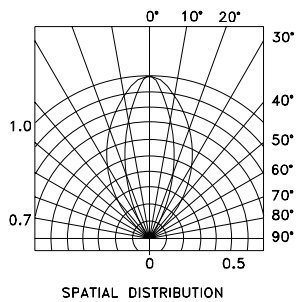
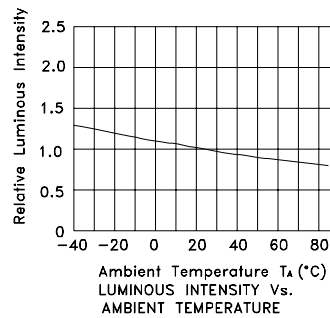
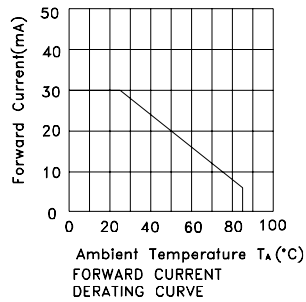
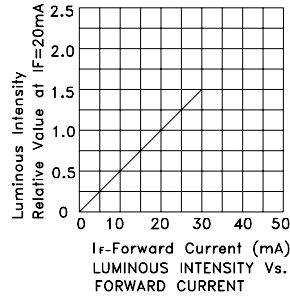
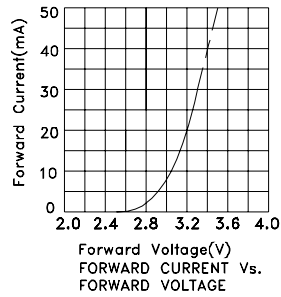
Note:

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



Green

APED3820VGC/A-F01



APED3820VGC/A-F01

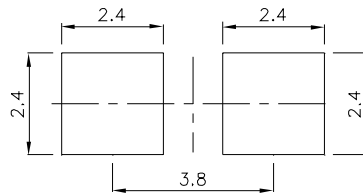
Reflow Soldering Profile For Lead-free SMT Process.



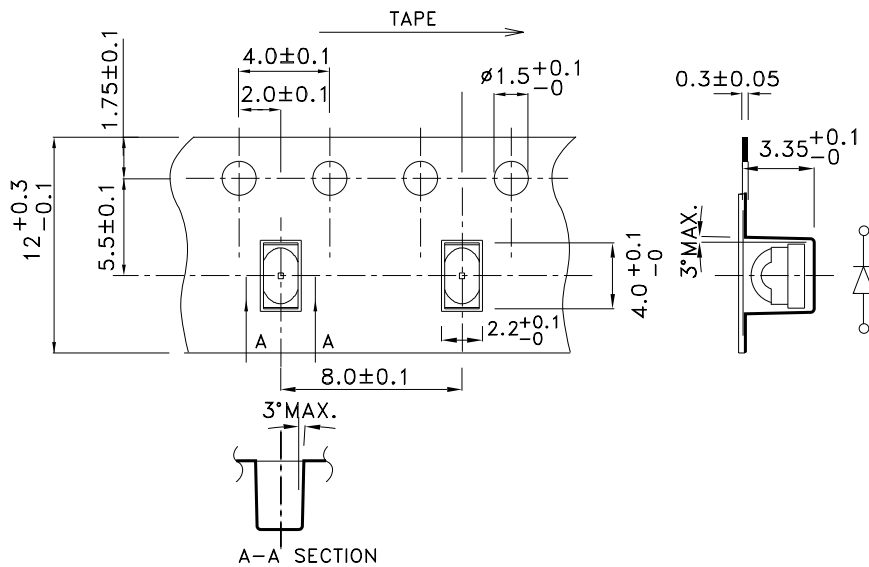
NOTES:

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)

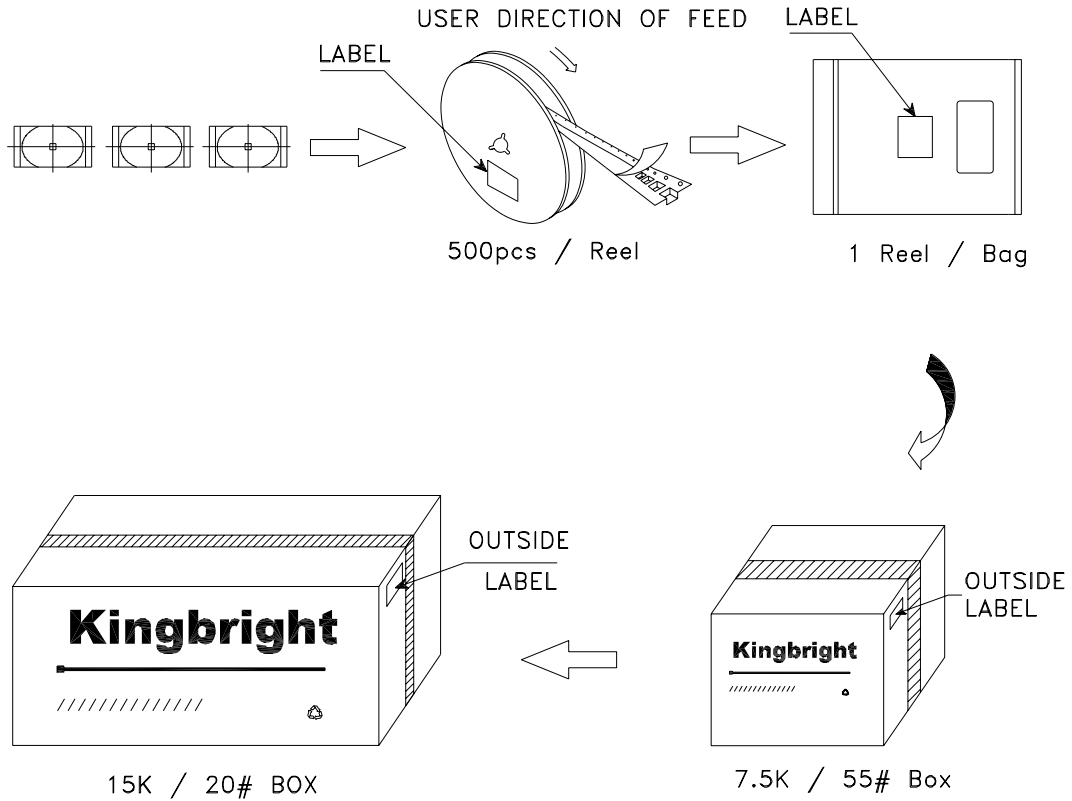



Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

APED3820VGC/A-F01



<h2>Kingbright</h2>				
P/NO: APED3820xxx				
QTY: 500 pcs	Q.C. <table border="1"><tr><td>Q C</td></tr><tr><td>xx xx xxxx</td></tr><tr><td>PASSED</td></tr></table>	Q C	xx xx xxxx	PASSED
Q C				
xx xx xxxx				
PASSED				
S/N: XXXX				
CODE: XXX				
LOT NO:				
 xx				
MADE IN CHINA	RoHS Compliant			