

3.0x1.0 mm SMD CHIP LED LAMP

PRELIMINARY SPEC

Part Number: APECVA3010MGC

Mega Green

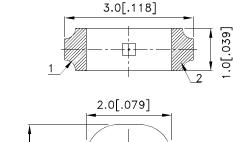
Features

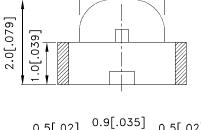
- 3.0mmx1.0mm SMT LED, 2.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

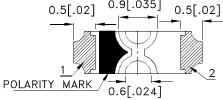
Description

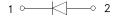
The Mega Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

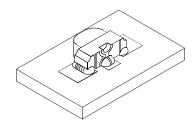
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.15(0.006") 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.





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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		21	Min.	Тур.	201/2
APECVA3010MGC	Mega Green (AlGaInP)	WATER CLEAR 36		80	120°

- 1. 01/2 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	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Mega Green	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Mega Green	570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Mega Green	26		nm	IF=20mA
С	Capacitance	Mega Green	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Mega Green	2.1	2.5	V	IF=20mA
lr	Reverse Current	Mega Green		10	uA	V _R =5V

Notes:

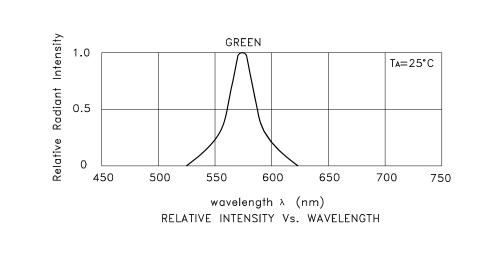
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Mega Green	Units	
Power dissipation	75	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		

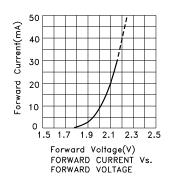
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

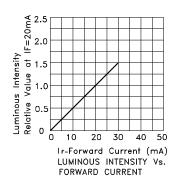
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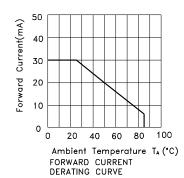


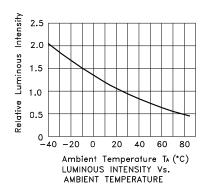
Mega Green

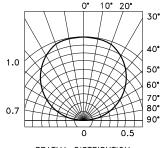
APECVA3010MGC











SPATIAL DISTRIBUTION

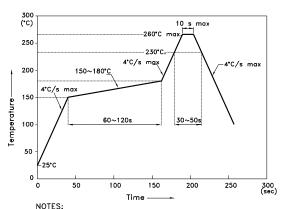
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



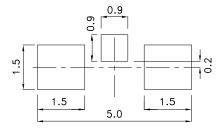
NOTES:

1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

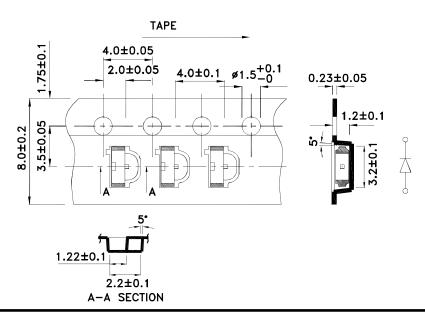
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

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

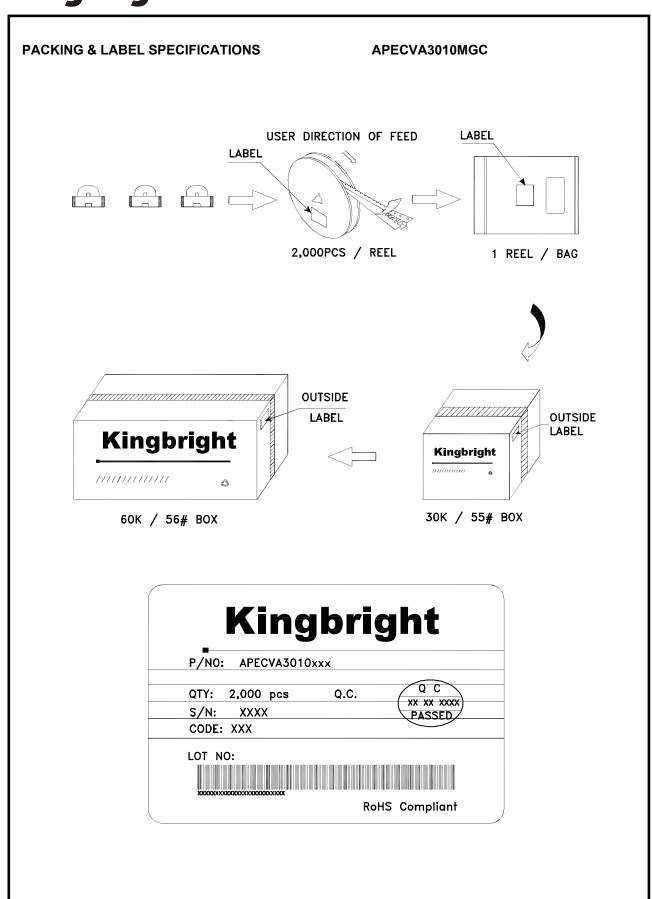


Tape Dimensions (Units: mm)



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