

Kingbright

3.5x2.8 mm SMD CHIP LED LAMP

Part Number: AA3528AMGC

Mega Green

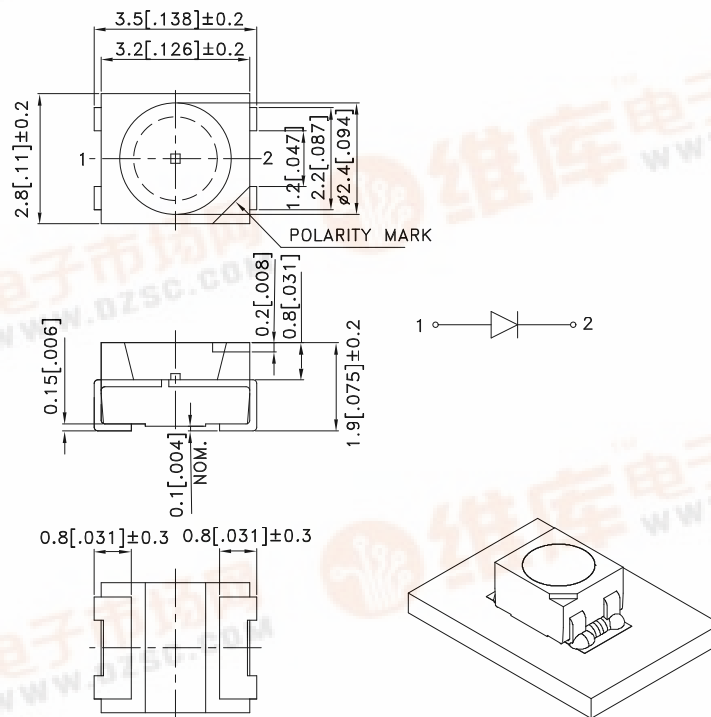
Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

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

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") 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
AA3528AMGC	Mega Green (InGaAlP)	WATER CLEAR	70	150	120°

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	Mega Green	574		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Mega Green	568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Mega Green	26		nm	I _F =20mA
C	Capacitance	Mega Green	20		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Mega Green	2.1	2.5	V	I _F =20mA
I _R	Reverse Current	Mega Green		10	uA	V _R =5V

Notes:

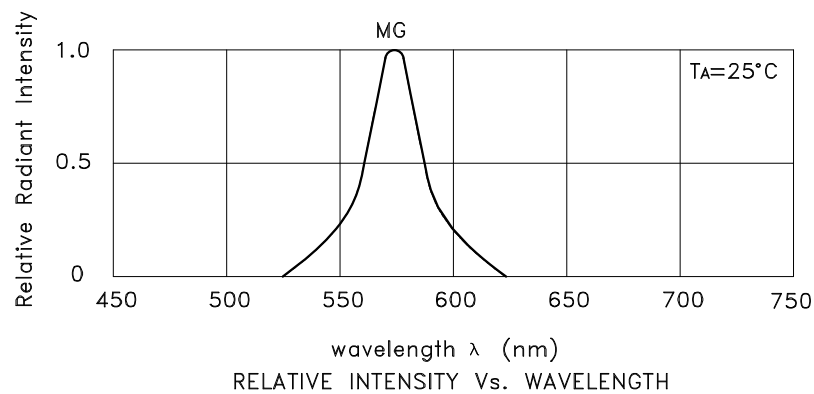
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Mega Green	Units
Power dissipation	125	mW
DC Forward Current	50	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	

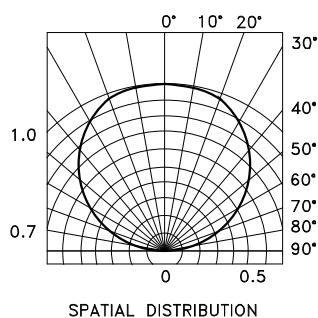
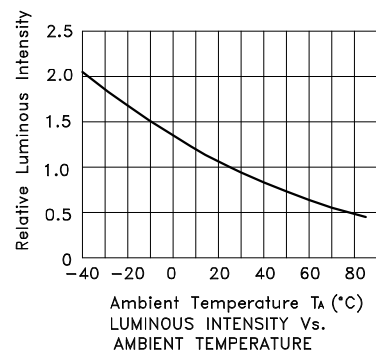
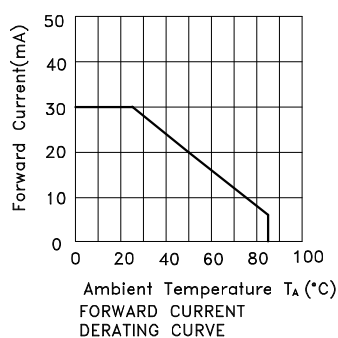
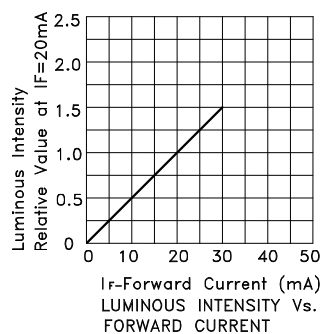
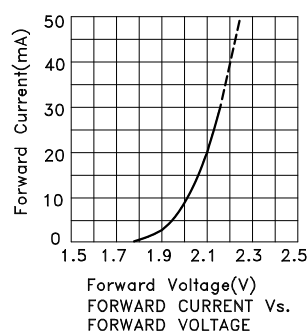
Note:

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



Mega Green

AA3528AMGC



The graph illustrates the temperature profile of the furnace during the heat treatment of the specimen. The Y-axis represents Temperature in degrees Celsius (°C), ranging from 0 to 300. The X-axis represents Time in seconds (sec), ranging from 0 to 300. The profile starts at 25°C, rises at 4°C/s to 150°C (40s), then to 180°C (60-120s), then to 260°C (160s), holds at 260°C for 10s, and finally cools at 4°C/s to 100°C (250s).

NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$. 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.

Technical drawing of a 3.5mm pitch tape carrier package. The drawing includes a top view and a cross-section A-A.

Top View Dimensions:

- Total Width: 12 ± 0.3
- Total Length: 4.0 ± 0.1
- Distance between mounting holes: 2 ± 0.05 and 4.0 ± 0.1
- Mounting hole diameter: $\varnothing 1.55 \pm 0.05$
- Distance from center of third hole to right edge: $3.1 + 0.15 / -0$
- Central area width: $3.95 + 0.15 / -0$
- Chamfer: 5°MAX.

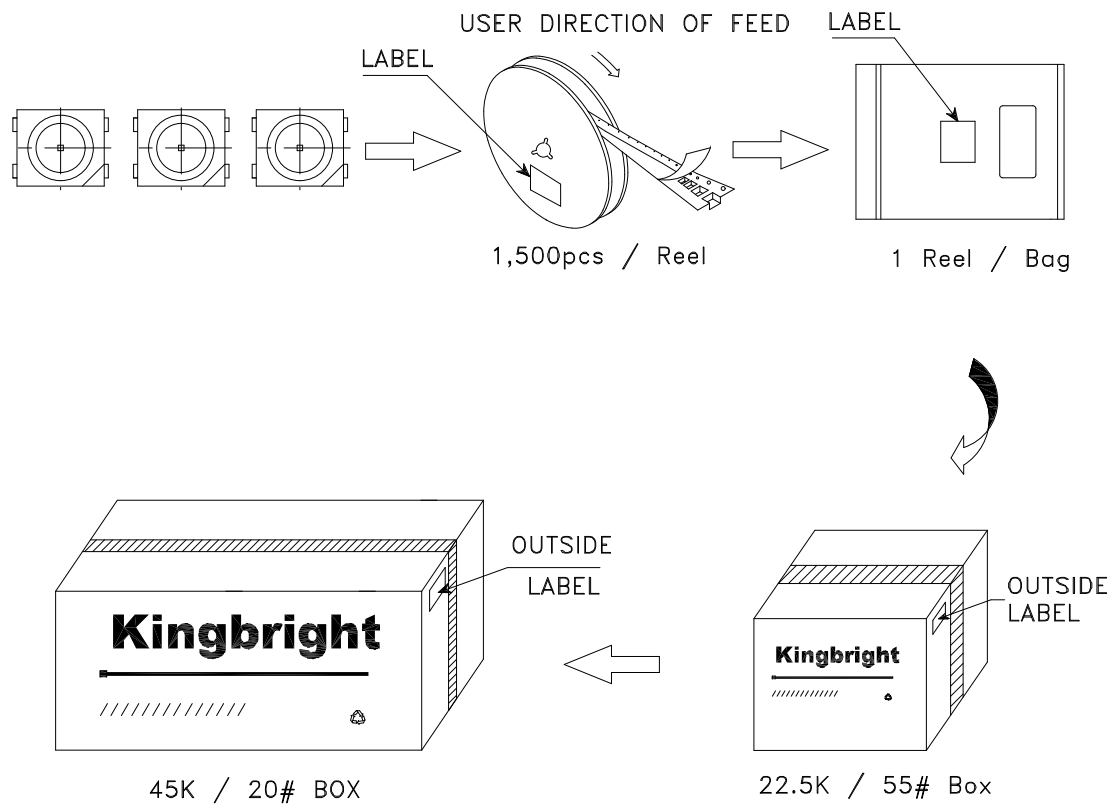
Cross-section A-A Dimensions:

- Total thickness: 2.15 ± 0.1
- Top layer thickness: 0.25 ± 0.1
- Chamfer: 5°MAX.

A dimension line at the top indicates the **TAPE** direction.

PACKING & LABEL SPECIFICATIONS

AA3528AMGC



Kingbright	
P/NO: AA3528Axxx	
QTY: 1,500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
XXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	