

### Features

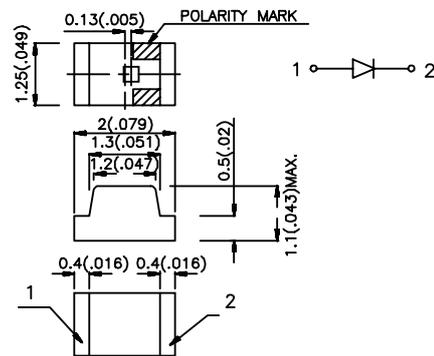
- 2.0mmx1.2mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.

AP2012MGCK MEGA GREEN

### Package Dimensions

### Description

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



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1$  (0.004") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

### Selection Guide

| Part No.   | Dice                 | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|------------|----------------------|-------------|---------------------|------|------------------|
|            |                      |             | Min.                | Typ. | 2 $\theta$ 1/2   |
| AP2012MGCK | MEGA GREEN (InGaAlP) | WATER CLEAR | 10                  | 30   | 120°             |

### Note:

1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

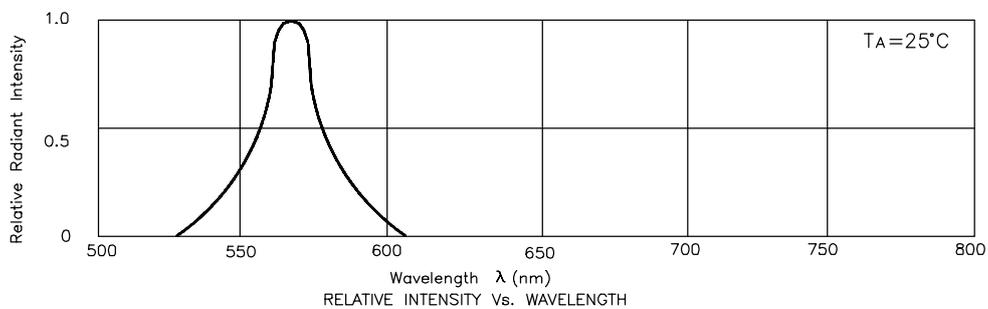
| Symbol                | Parameter               | Device     | Typ. | Max. | Units | Test Conditions |
|-----------------------|-------------------------|------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength         | Mega Green | 565  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | Mega Green | 25   |      | nm    | IF=20mA         |
| C                     | Capacitance             | Mega Green | 20   |      | pF    | VF=0V;f=1MHz    |
| V <sub>F</sub>        | Forward Voltage         | Mega Green | 2.25 | 2.5  | V     | IF=20mA         |
| I <sub>R</sub>        | Reverse Current         | All        |      | 10   | uA    | VR = 5V         |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

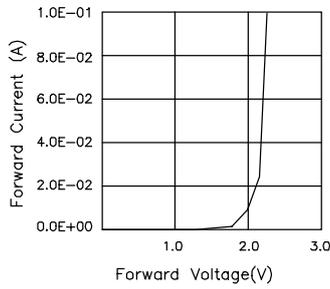
| Parameter                     | Mega Green     | Units |
|-------------------------------|----------------|-------|
| Power dissipation             | 105            | mW    |
| DC Forward Current            | 25             | mA    |
| Peak Forward Current [1]      | 200            | mA    |
| Reverse Voltage               | 5              | V     |
| Operating/Storage Temperature | -40°C To +85°C |       |

Note:

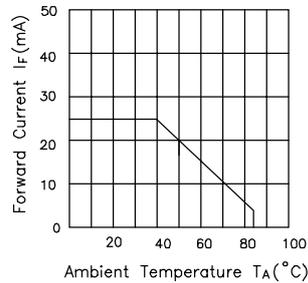
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



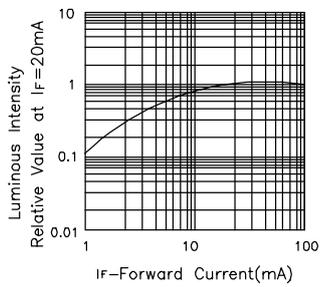
## Mega Green AP2012MGCK



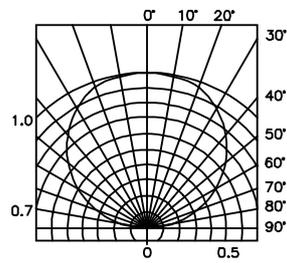
FORWARD CURRENT vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

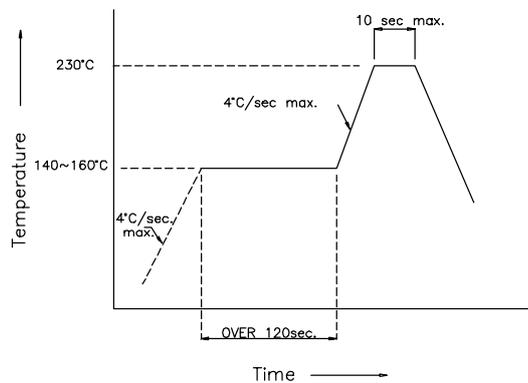


LUMINOUS INTENSITY vs. FORWARD CURRENT



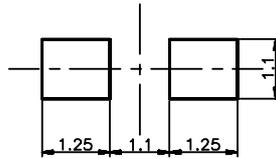
SPATIAL DISTRIBUTION

## AP2012MGCK SMT Reflow Soldering Instructions



## AP2012MGCK Recommended Soldering Pattern (Units : mm)

FOR REFLOW SOLDERING



## AP2012MGCK Tape Specifications (Units : mm)

