

APT2012SEC

SUPER BRIGHT ORANGE

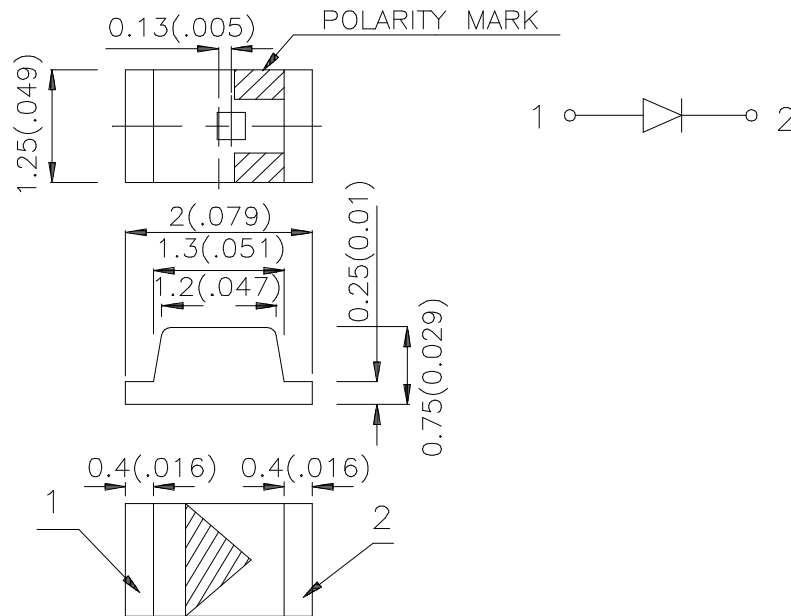
Features

- 2.0mmx1.25mm SMT LED,0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

Description

The Super Bright Orange device is made with DH InGaAlP (on GaAs substrate) light emitting diode chip.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
|------------|-------------------------------|-------------|--------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APT2012SEC | SUPER BRIGHT ORANGE (InGaAlP) | WATER CLEAR | 70 | 200 | 120° |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

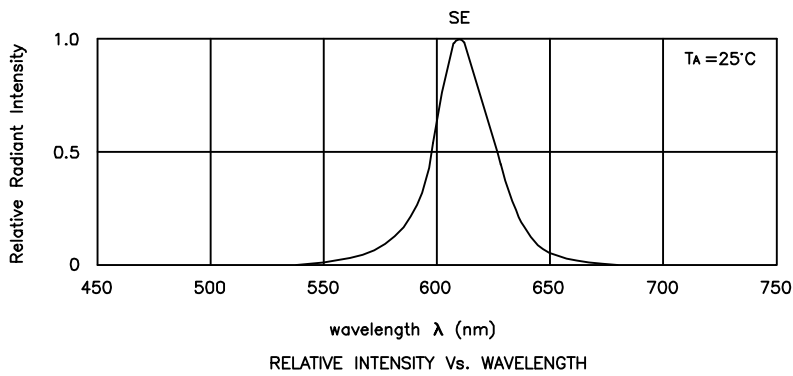
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|-------|-----------------|
| λ_{peak} | Peak Wavelength | Super Bright Orange | 610 | | nm | IF=20mA |
| λ_D | Dominant Wavelength | Super Bright Orange | 601 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Orange | 29 | | nm | IF=20mA |
| C | Capacitance | Super Bright Orange | 30 | | pF | VF=0V;f=1MHz |
| VF | Forward Voltage | Super Bright Orange | 2.0 | 2.5 | V | IF=20mA |
| IR | Reverse Current | Super Bright Orange | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at TA=25°C

| Parameter | Super Bright Orange | Units |
|---------------------------------|---------------------|-------|
| Power dissipation | 75 | mW |
| Forward Current | 30 | mA |
| Peak Forward Current [1] | 195 | mA |
| Reverse Voltage | 5 | V |
| Operating / Storage Temperature | -40°C To +85°C | |

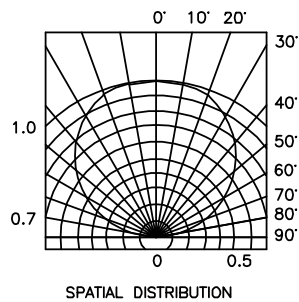
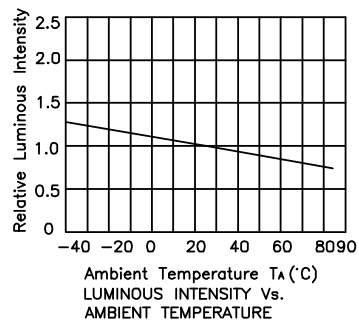
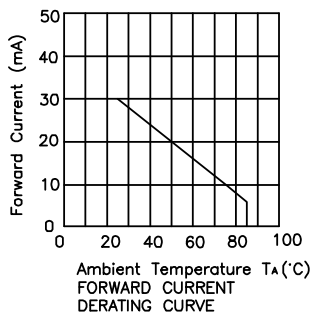
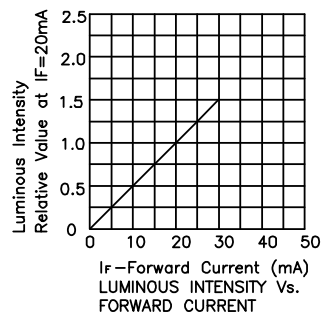
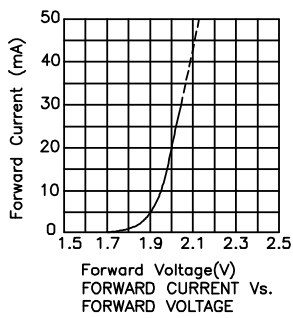
Note:

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



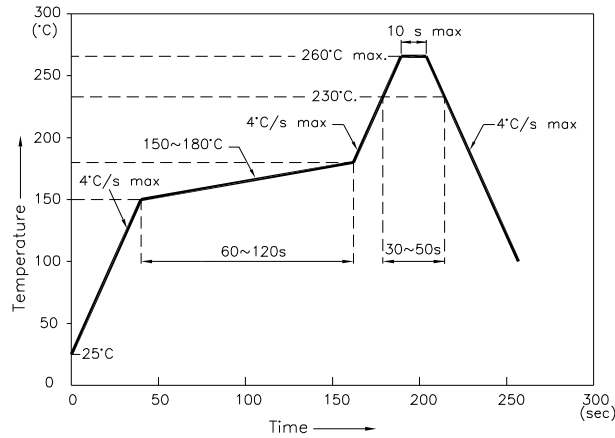
Super Bright Orange

APT2012SEC



APT2012SEC

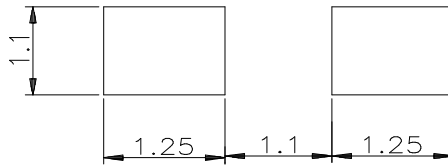
Reflow Soldering Profile For Lead-free SMT Process.



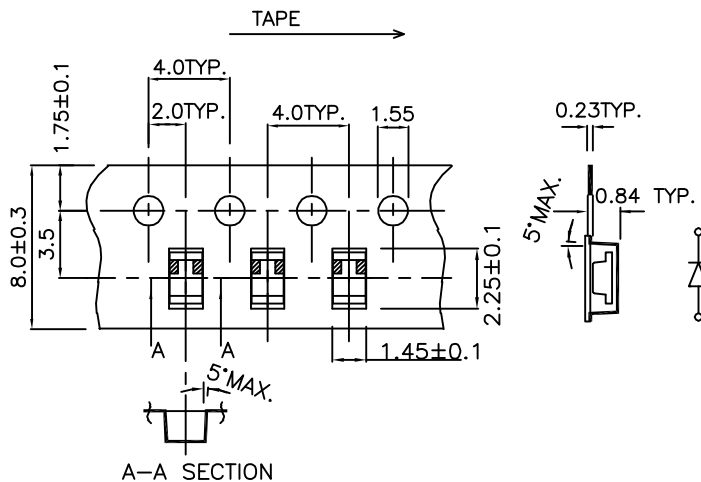
NOTES:

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)



Tape Specifications (Units : mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.