Kingbright

SUBMINIATURE SOLID STATE LAMP

AM27SEC08 SUPER BRIGHT ORANGE

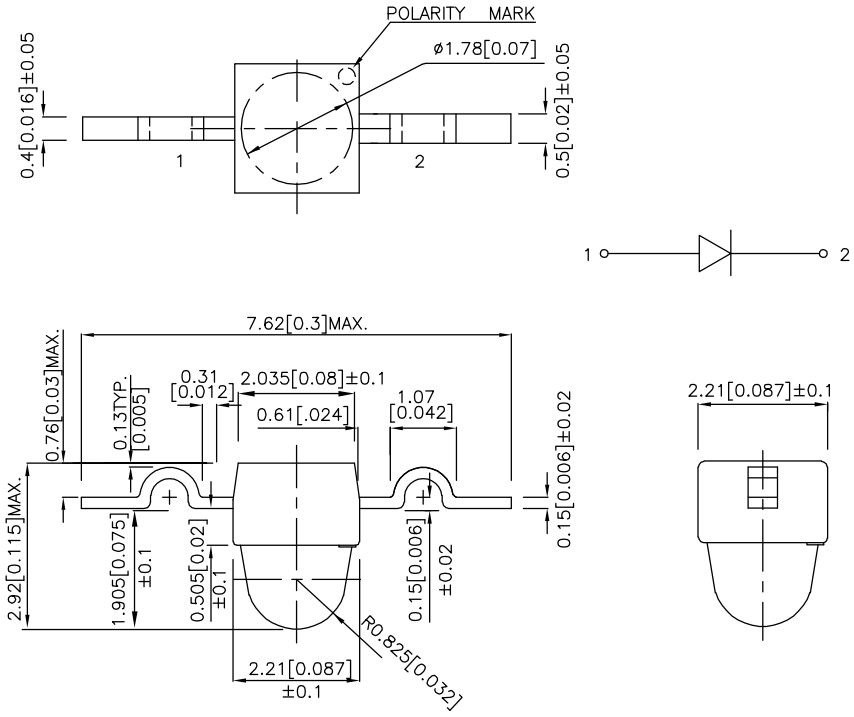
Features

- ●SUBMINIATURE PACKAGE.
- ●WIDE VIEWING ANGLE.
- ●YOKE LEAD.
- ●LONG LIFE-SOLID STATE RELIABILITY.
- ●LOW PACKAGE PROFILE.
- ●PACKAGE : 1000PCS / REEL.
- ●RoHS COMPLIANT.

Description

The Super Bright Orange 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. Lead spacing is measured where the lead emerge from the package.
4. Specifications are subject to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
AM27SEC08	SUPER BRIGHT ORANGE (InGaAlP)	WATER CLEAR	480	1300	20°

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

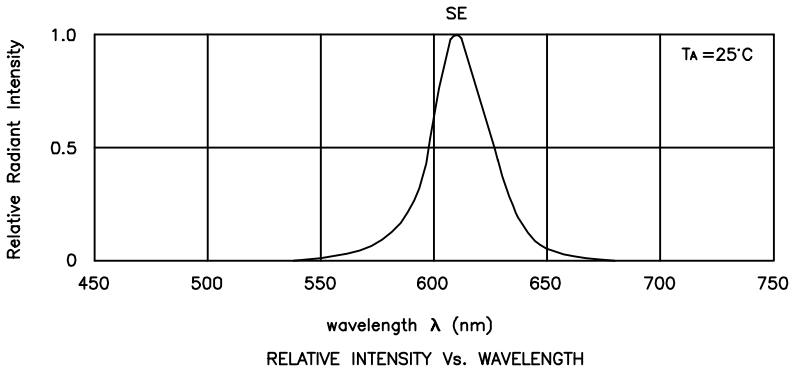
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange	610		nm	I_F=20mA
λD	Dominant Wavelength	Super Bright Orange	601		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	29		nm	I_F=20mA
C	Capacitance	Super Bright Orange	30		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Super Bright Orange	2.0	2.5	V	I_F=20mA
I_R	Reverse Current	Super Bright Orange		10	uA	V_R= 5V

Absolute Maximum Ratings at T_A=25°C

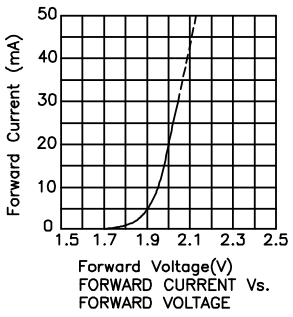
Parameter	Super Bright Orange	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	195	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

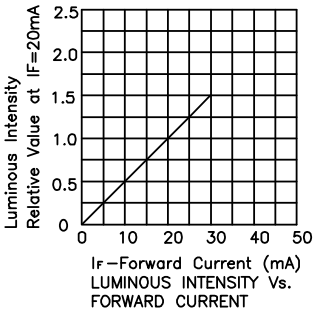


RELATIVE INTENSITY Vs. WAVELENGTH

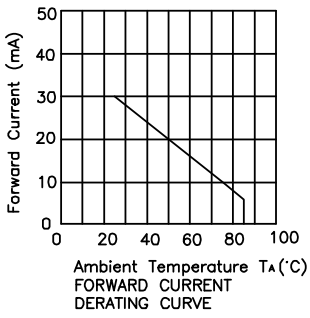
Super Bright Orange **AM27SEC08**



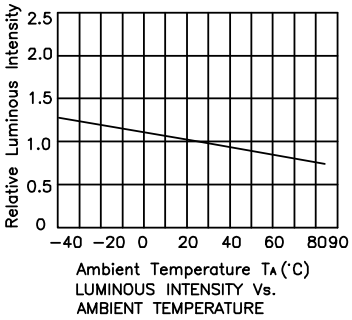
FORWARD CURRENT Vs. FORWARD VOLTAGE



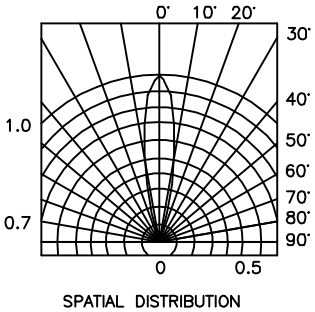
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

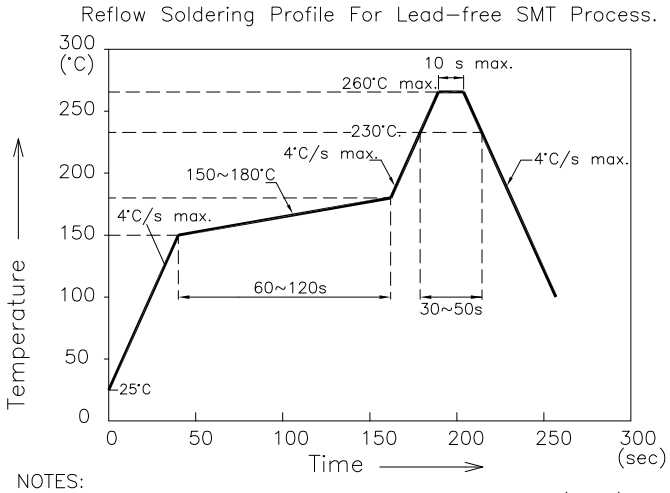


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

AM27SEC08



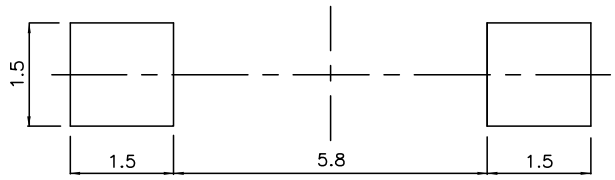
NOTES:

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

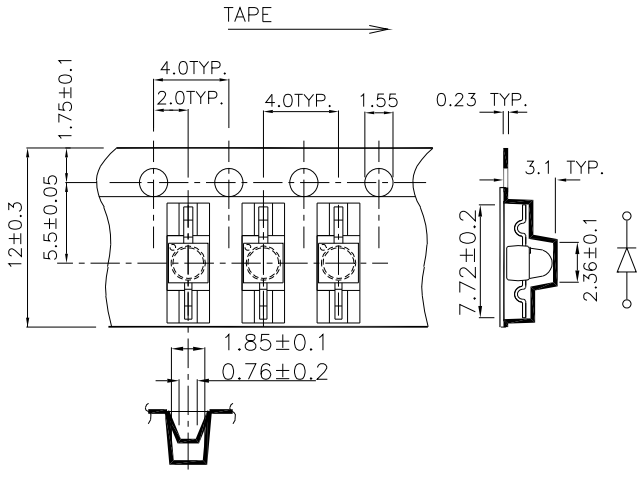
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

Recommended Soldering Pattern
(Units : mm)



Tape Specifications
(Units : mm)



Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

1.Wavelength: +/-1nm (Test condition is based on the sorting standard).

2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).

3.Forward voltage: +/-0.1V (Test condition is based on the sorting standard).