Kingbright

SUBMINIATURE SOLID STATE LAMP

Part Number: AM2520SECK09

Super Bright Orange

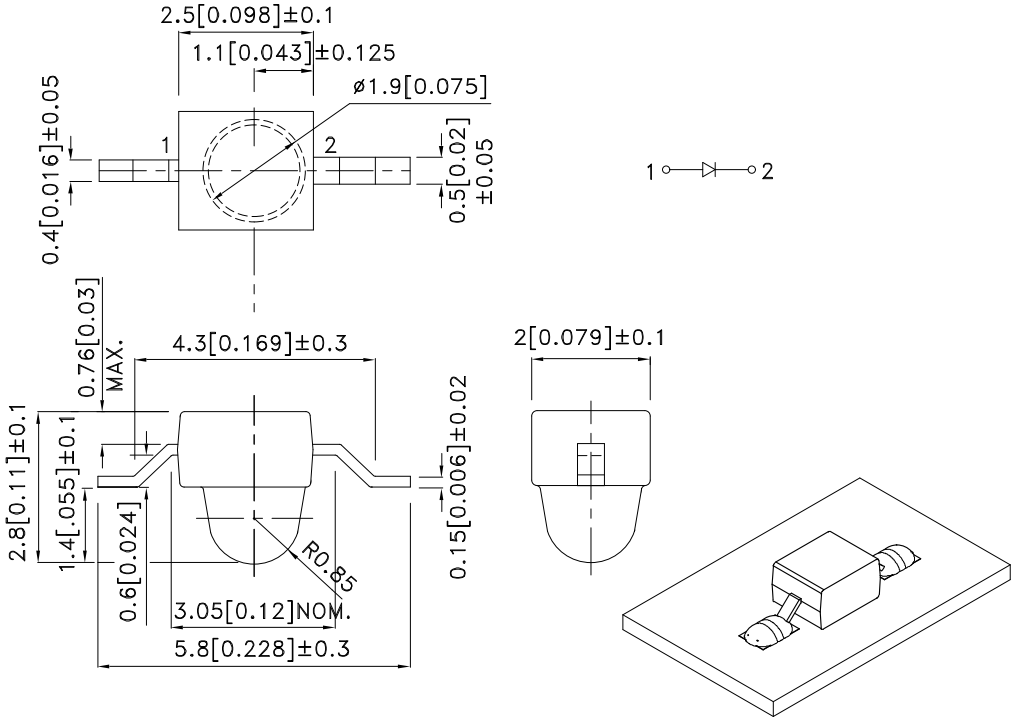
Features

- SUBMINIA TURE PACKAGE.
- WIDE VIEWING ANGLE.
- Z-BEND LEAD.
- LONG LIFE - SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- PACKAGE : 1000PCS / 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 ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.
5. 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
AM2520SECK09	Super Bright Orange (InGaAlP)	WATER CLEAR	900	1800	20°

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

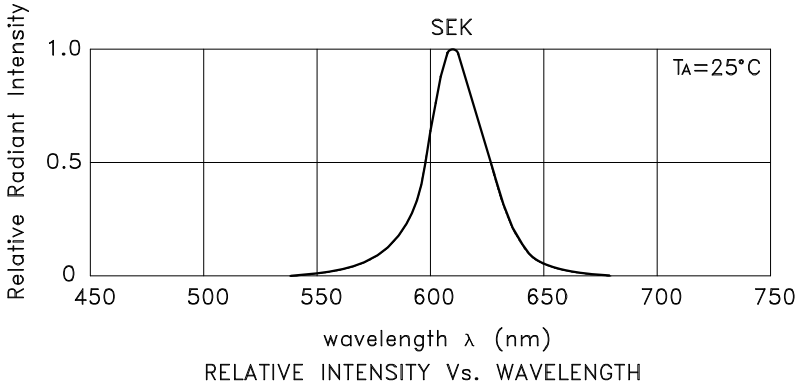
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange	610		nm	I_F=20mA
λD [1]	Dominant Wavelength	Super Bright Orange	601		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	29		nm	I_F=20mA
C	Capacitance	Super Bright Orange	15		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage	Super Bright Orange	2.1	2.5	V	I_F=20mA
I_R	Reverse Current	Super Bright Orange		10	uA	V_R=5V

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

Absolute Maximum Ratings at TA=25°C

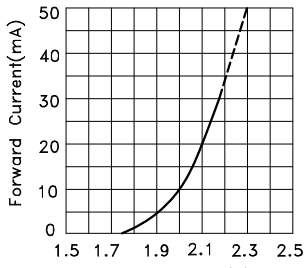
Parameter	Super Bright Orange	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	195	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

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

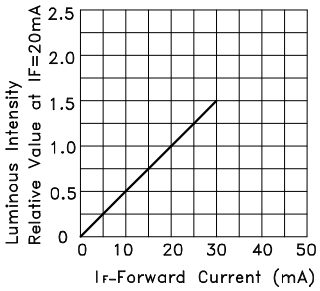


RELATIVE INTENSITY Vs. WAVELENGTH

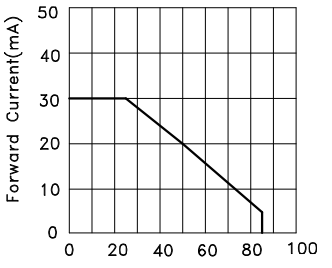
Super Bright Orange AM2520SECK09



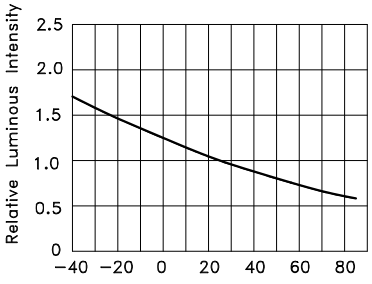
FORWARD CURRENT Vs.
FORWARD VOLTAGE



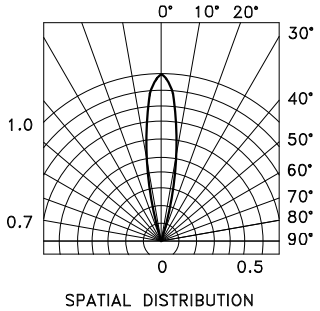
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



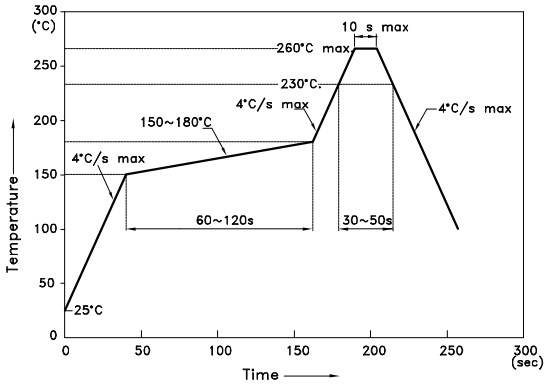
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

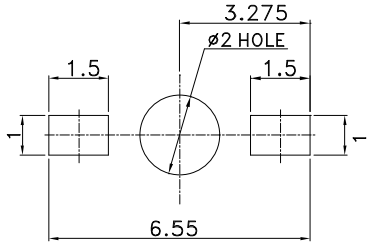
AM2520SECK09

Reflow Soldering Profile For Lead-free SMT Process.

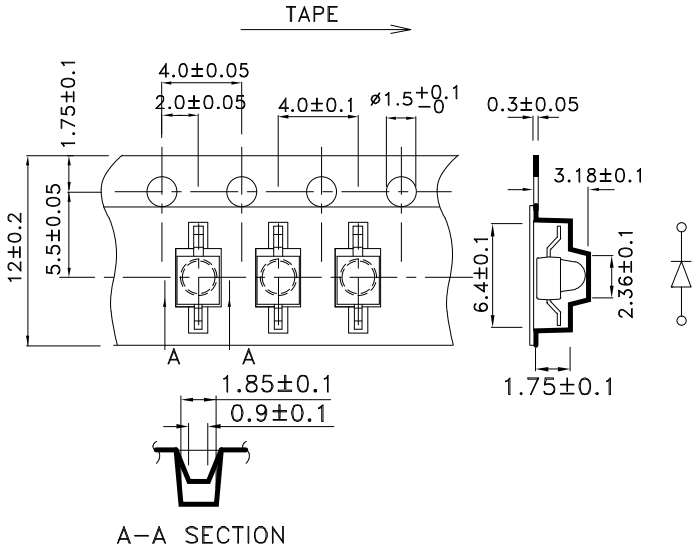


NOTES:
1. We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

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



Tape Specifications
(Units : mm)



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PACKING & LABEL SPECIFICATIONS **AM2520SECK09**

