Kingbright

SURFACE MOUNT DISPLAY

Part Number: KCDA03-106

SUPER BRIGHT ORANGE

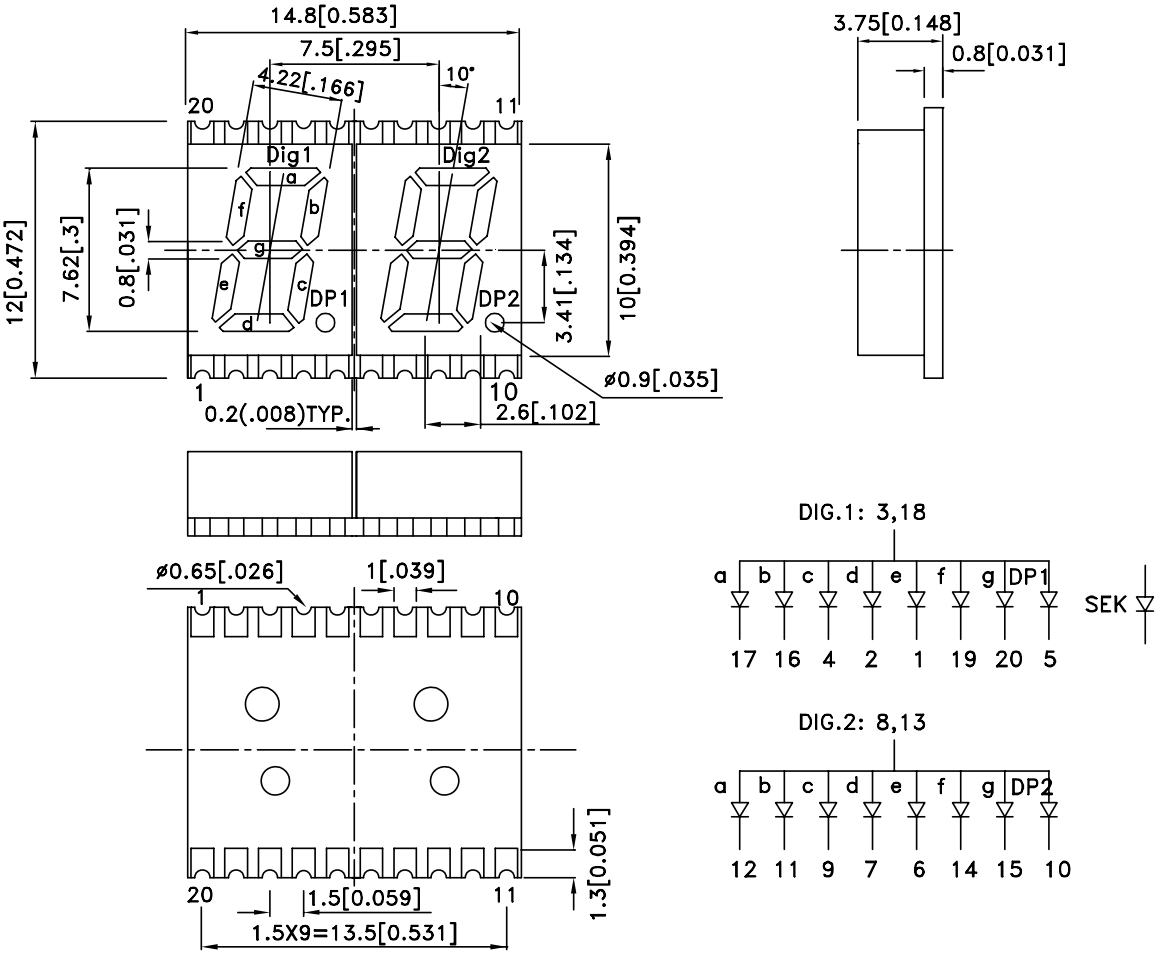
Features

- 0.3 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE :300PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

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

Package Dimensions & Internal Circuit Diagram



Notes:
1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
KCDA03-106	SUPER BRIGHT ORANGE (InGaAlP)	WHITE DIFFUSED	12000	46000	Common Anode, Rt. Hand Decimal.

Note:
1.Luminous Intensity/ Luminous Flux: +/-15%.

Electrical / Optical Characteristics at T_A=25°C

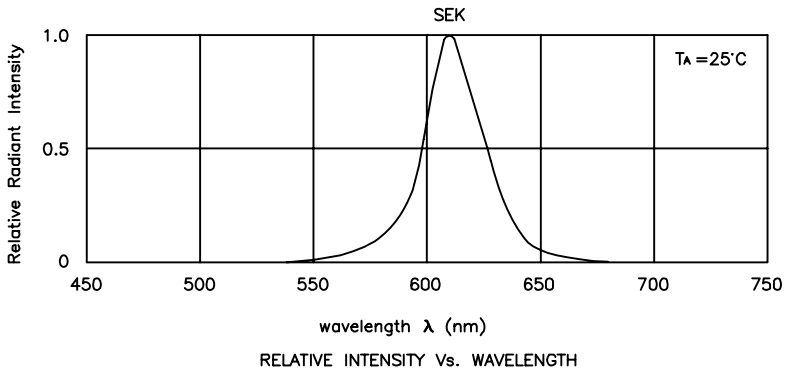
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange	610		nm	I_F=20mA
λD[1]	Dominant Wavelength	Super Bright Orange	601		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	29		nm	I_F=20mA
C	Capacitance	Super Bright Orange	15		pF	V_F=0V;f=1MHz
V_F[2]	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 T_A=25°C

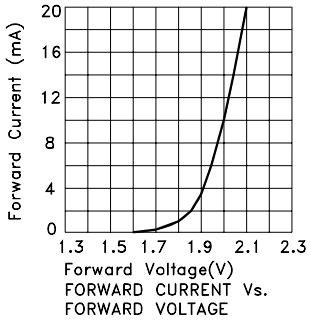
Parameter	Super Bright Orange	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	195	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

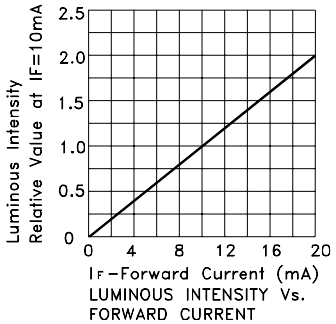


RELATIVE INTENSITY Vs. WAVELENGTH

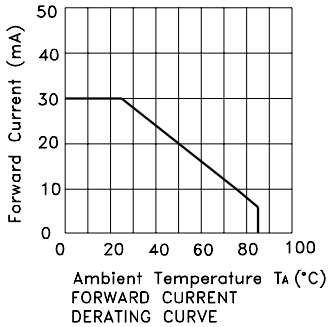
Super Bright Orange **KCDA03-106**



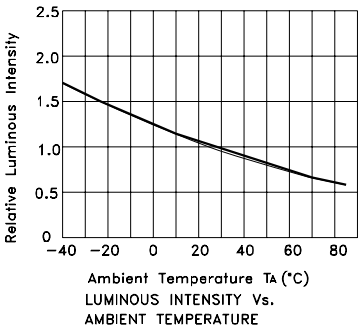
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



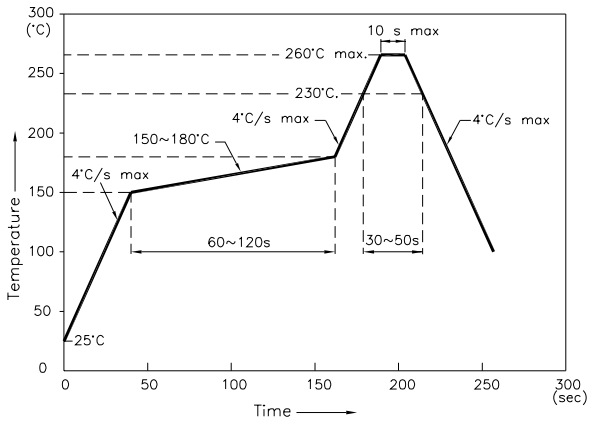
FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

KCDA03-106

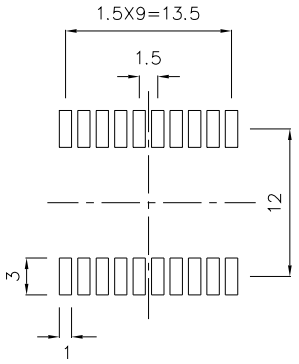
Reflow Soldering Profile For Lead-free SMT Process.



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:± 0.15)



Tape Specifications
(Units : mm)

