

SURFACE MOUNT DISPLAY

KPSA03-101

HIGH EFFICIENCY RED

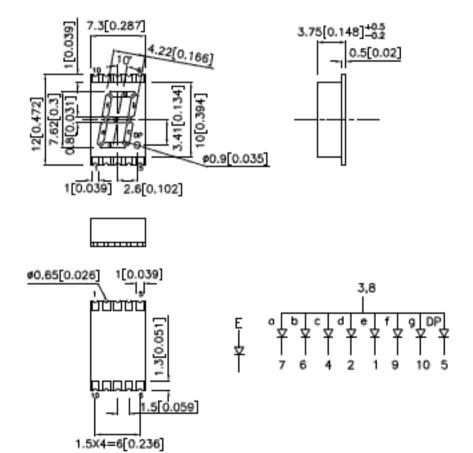
Features

- •0.3 INCH DIGIT HEIGHT.
- .LOW CURRENT OPERATION.
- . EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- •MECHANICALLY RUGGED.
- . GRAY FACE, WHITE SEGMENT.
- .PACKAGE: 1100PCS / REEL.

Description

The High Efficiency Red source color devices are made with Gaillum Arsenide Phosphide on Gaillum Phosphide Orange Light Emitting Diode.

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.

SPEC NO: DSAB5533 APPROVED: J. Lu REV NO: V.6

CHECKED: Joe Lee

DATE: MAR/22/2005

DRAWN: W.J.ZHU

PAGE: 1 OF 4

Kingbright

Selection Guide

Part No.	Dice	Lens Type	lv (ucd) @ 10 mA		Description	
			Min.	Тур.	-	
KPSA03-101	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	1200	4210	Common Anode, Rt. Hand Decimal.	

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Unita	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	ie=20mA
λD	Dominant Wavelength	High Efficiency Red	625		nm	ir-20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	ir=20mA
С	Capacitance	High Efficiency Red	15		pF	Vr=0V;f=1MHz
VF	Forward Voltage	High Efficiency Red	2.0	2.5	ν	ir-20mA
lie	Reverse Current	High Efficiency Red		10	uA	Vn = 5V

Absolute Maximum Ratings at Ta=25°C

Parameter	High Efficiency Red	Unita
Power dissipation	105	m/W
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	٧
Operating/Storage Temperature	-40°C To +85°C	

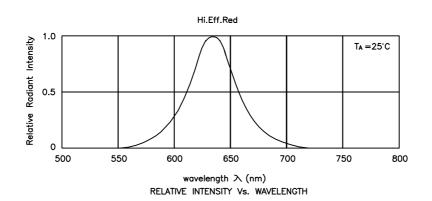
Note:

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

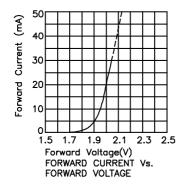
SPEC NO: DSAB5533 REV NO: V.6 DATE: MAR/22/2005 PAGE: 2 OF 4

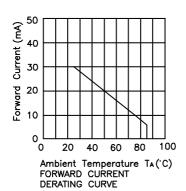
APPROVED: J. Lu CHECKED: Joe Lee DRAWN: W.J.ZHU

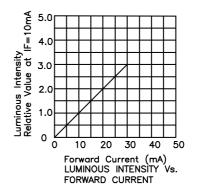
Kingbright

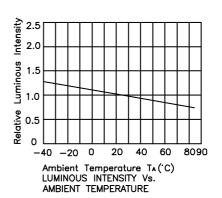


High Efficiency Red KPSA03-101









SPEC NO: DSAB5533 REV NO: V.6 DATE: MAR/22/2005 PAGE: 3 OF 4

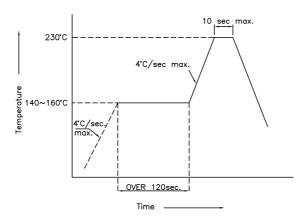
DRAWN: W.J.ZHU

APPROVED: J. Lu CHECKED: Joe Lee

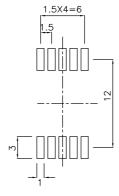
Kingbright

KPSA03-101 SMT Reflow Soldering Instructions

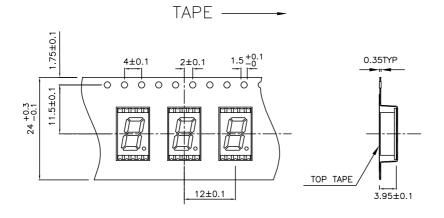
Number of reflow process shall be 2 times or less and cooling process to normal temperature is required between first and second soldering process.



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.

SPEC NO: DSAB5533 REV NO: V.6 DATE: MAR/22/2005 PAGE: 4 OF 4
APPROVED: J. Lu CHECKED: Joe Lee DRAWN: W.J.ZHU