

SURFACE MOUNT DISPLAY

Part Number: KCPSA04-101 HIGH EFFICIENCY RED

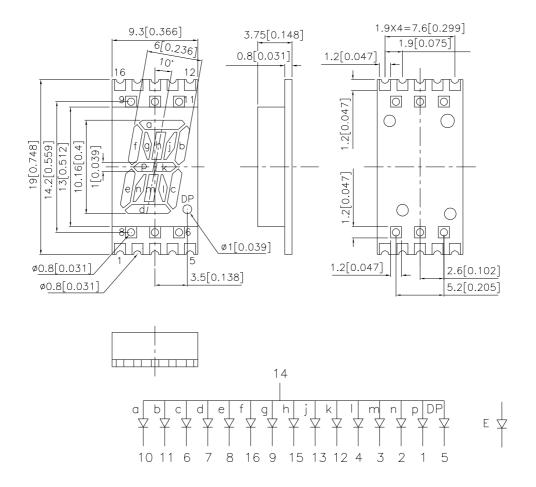
Features

- ●0.4 INCH CHARACTER HEIGHT.
- •LOW CURRENT OPERATION.
- •HIGH CONTRAST AND LIGHT OUTPUT.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- •CATEGORIZED FOR LUMINOUS INTENSITY.
- •MECHANICALLY RUGGED.
- •GRAY FACE, WHITE SEGMENT.
- ●PACKAGE: 400PCS / REEL.
- ●MOISTURE SENSITIVITY LEVEL: LEVEL 4.
- RoHS COMPLIANT.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium 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.
- 3.The gap between the reflector and PCB shall not exceed 0.25mm.

SPEC NO: DSAG2742 REV NO: V.2 DATE: MAY/20/2006 PAGE: 1 OF 4
APPROVED: J. Lu CHECKED: Joe Lee DRAWN: W.J.ZHU

Kingbright

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
KCPSA04-101	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	800	3200	Common Anode, Rt. Hand Decimal.

Note:

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
С	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
lr	Reverse Current	High Efficiency Red		10	uA	VR = 5V

Notes:

1. Wavelength: +/-1nm.

Absolute Maximum Ratings at Ta=25°C

Parameter	High Efficiency Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

Note:

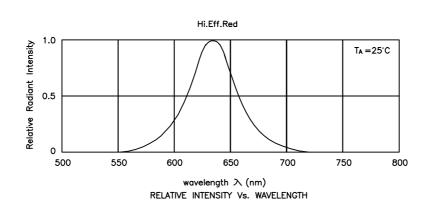
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

SPEC NO: DSAG2742 REV NO: V.2 DATE: MAY/20/2006 PAGE: 2 OF 4
APPROVED: J. Lu CHECKED: Joe Lee DRAWN: W.J.ZHU

^{1.}Luminous Intensity / Luminous Flux: +/-15%.

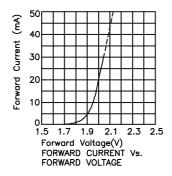
^{2.} Forward Voltage: +/-0.1V.

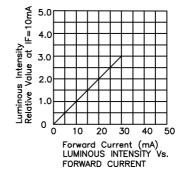
Kingbright

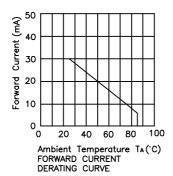


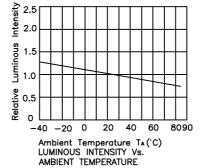
High Efficiency Red

KCPSA04-101









SPEC NO: DSAG2742 **REV NO: V.2** DATE: MAY/20/2006 PAGE: 3 OF 4 **CHECKED:** Joe Lee DRAWN: W.J.ZHU

APPROVED: J. Lu

Kingbright

KCPSA04-101 Reflow Soldering Profile For Lead-free SMT Process. 10_s_max 250 4°C/s max 200 150~180°C 150 100 50 0 50 100 150 200 250 300 (sec) Time 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) 1.9X4=7.6 2.6 2.6X2=5.2 9 **Tape Specifications** (Units: mm) TAPE 1.5 +0.1 4±0.1 0.35TYP. 1.75±0.1 14.2 ± 0.1 TAPE 32 +0.3

SPEC NO: DSAG2742 **REV NO: V.2** DATE: MAY/20/2006 PAGE: 4 OF 4 APPROVED: J. Lu **CHECKED:** Joe Lee DRAWN: W.J.ZHU

16±0.1

3.95±0.1