

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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#### SURFACE MOUNT DISPLAY

P/N: ACSA03-41EWA-F01

HIGH EFFICIENCY RED

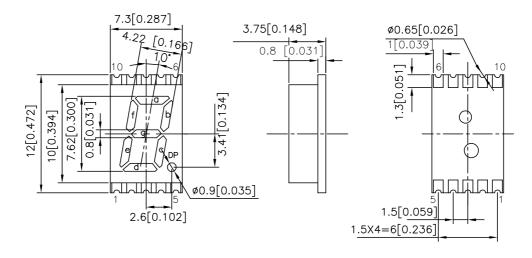
#### **Features**

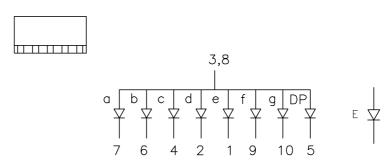
- •0.3 INCH DIGIT HEIGHT.
- •LOW CURRENT OPERATION.
- •EXCELLENT CHARACTER APPEARANCE.
- •I.C. COMPATIBLE.
- •MECHANICALLY RUGGED.
- •GRAY FACE, WHITE SEGMENT.
- •PACKAGE: 550PCS / REEL.
- RoHS COMPLIANT.

#### **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





- 1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  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: DSAG0569 **REV NO: V.1 DATE: DEC/26/2005** PAGE: 1 OF 5 APPROVED: J. Lu **CHECKED:** Joe Lee DRAWN: Y.L.LI ERP: 1351000391

#### **Selection Guide**

| Part No.         | Dice                           | Lens Type      | lv (ucd)<br>@ 10mA |      | Description                        |
|------------------|--------------------------------|----------------|--------------------|------|------------------------------------|
|                  |                                |                | Min.               | Тур. | -                                  |
| ACSA03-41EWA-F01 | HIGH EFFICIENCY RED(GaAsP/GaP) | WHITE DIFFUSED | 1200               | 4210 | Common Anode,<br>Rt. Hand Decimal. |

### Electrical / Optical Characteristics at Ta=25°C

| Symbol | Parameter                | Device              | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | IF=20mA         |
| λD     | 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     | Forward Voltage          | High Efficiency Red | 2.0  | 2.5  | V     | IF=20mA         |
| lR     | Reverse Current          | High Efficiency Red |      | 10   | uA    | VR = 5V         |

#### Absolute Maximum Ratings at Ta=25°C

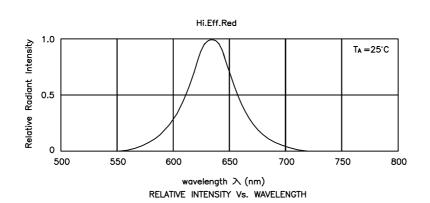
| Parameter                       | High Efficiency Red | Units |
|---------------------------------|---------------------|-------|
| Power dissipation               | 75                  | mW    |
| DC Forward Current              | 30                  | mA    |
| Peak Forward Current [1]        | 160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

Note

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

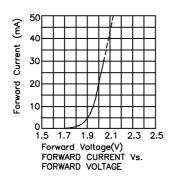
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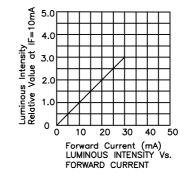
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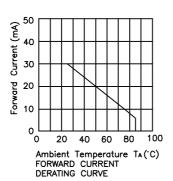


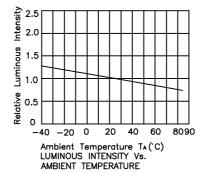
**High Efficiency Red** 

ACSA03-41EWA-F01



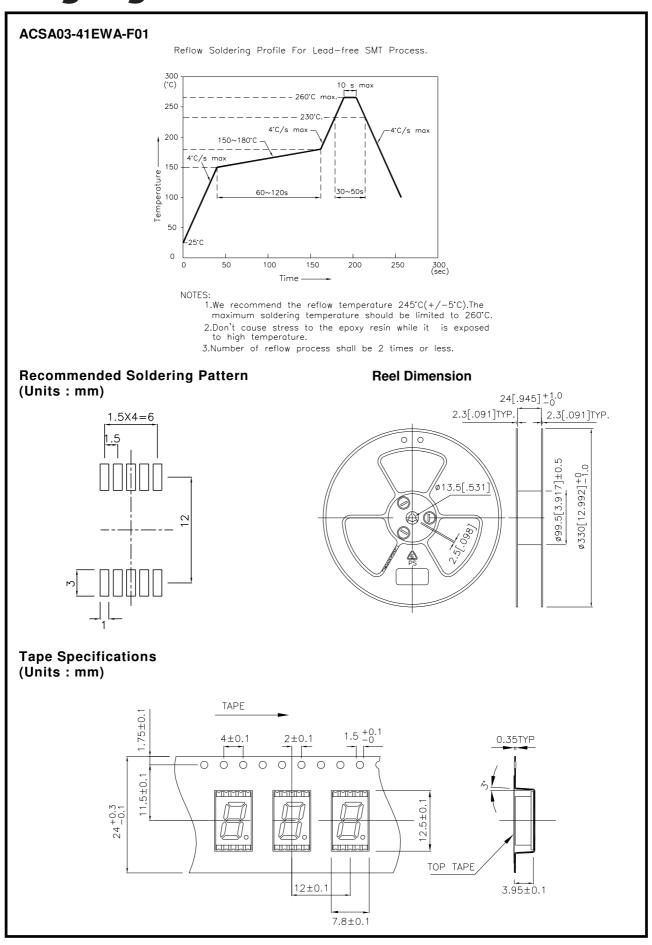






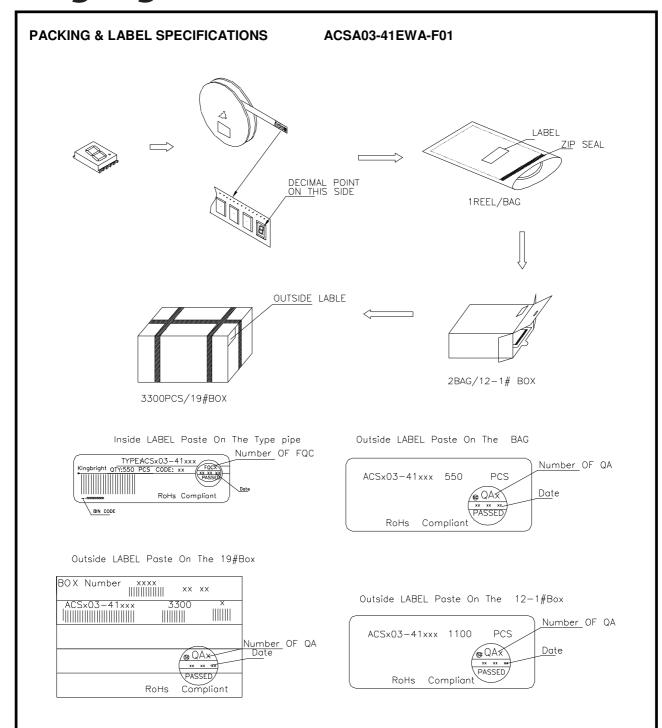
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#### Remarks

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous intensity/ luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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