

APSA03-41EWA HIGH EFFICIENCY RED

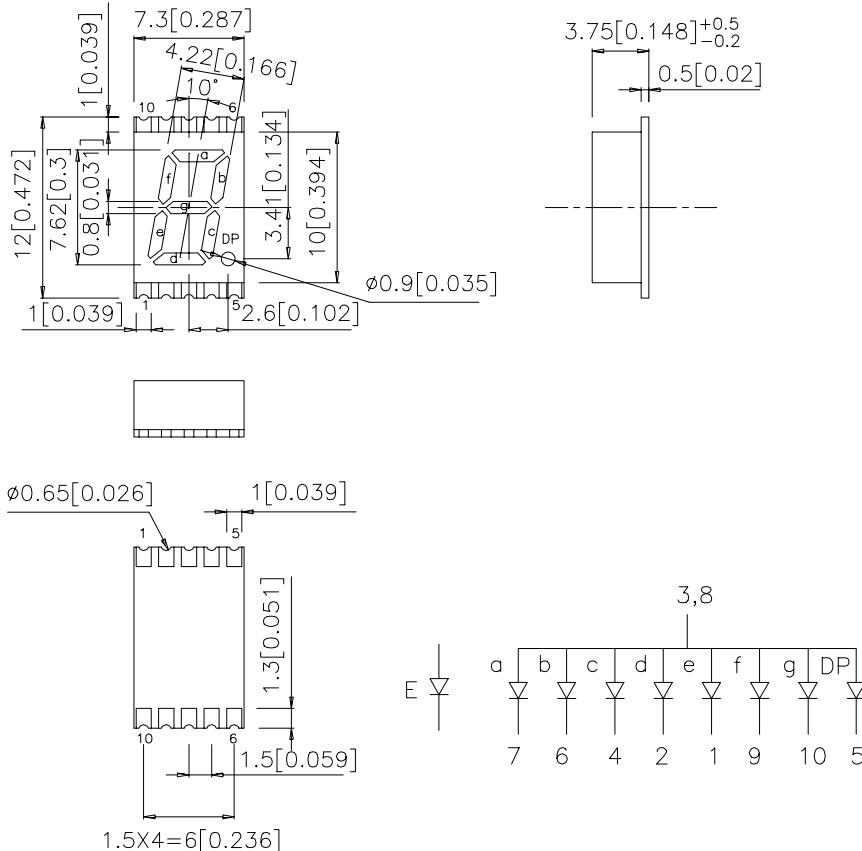
### Features

- 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 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  $\pm 0.25(0.01")$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Selection Guide

| Part No.     | Dice                           | Lens Type      | I <sub>V</sub> (ucd)<br>@ 10 mA |      | Description                      |
|--------------|--------------------------------|----------------|---------------------------------|------|----------------------------------|
|              |                                |                | Min.                            | Typ. |                                  |
| APSA03-41EWA | HIGH EFFICIENCY RED(GaAsP/GaP) | WHITE DIFFUSED | 1200                            | 4210 | Common Anode.<br>Rt.Hand Decimal |

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

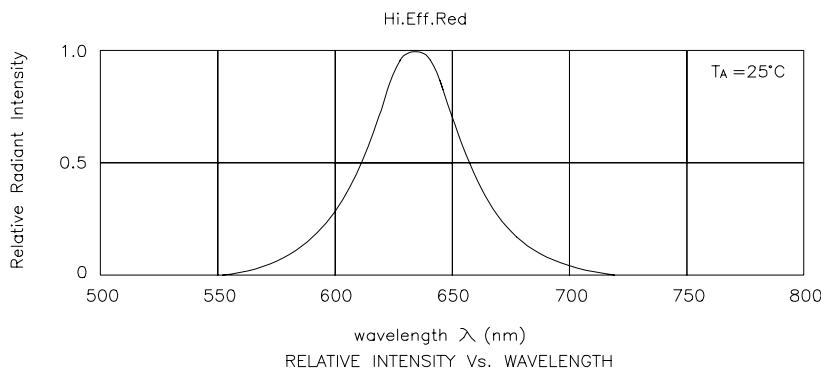
| Symbol            | Parameter                | Device              | Typ. | Max. | Units | Test Conditions           |
|-------------------|--------------------------|---------------------|------|------|-------|---------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | I <sub>F</sub> =20mA      |
| λ D               | Dominate Wavelength      | High Efficiency Red | 625  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ1/2             | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | I <sub>F</sub> =20mA      |
| C                 | Capacitance              | High Efficiency Red | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | High Efficiency Red | 2.0  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>    | Reverse Current          | High Efficiency Red |      | 10   | uA    | V <sub>R</sub> = 5V       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

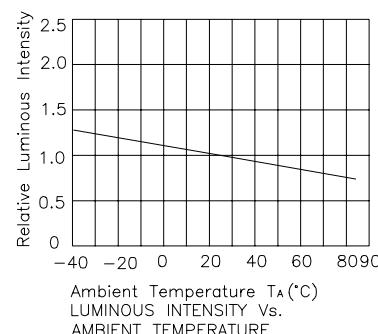
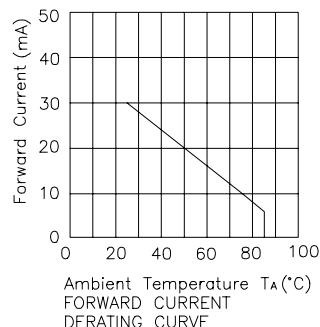
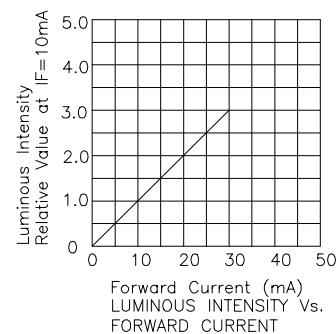
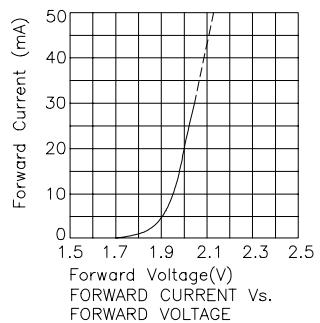
| Parameter                     | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 105                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 160                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |

Note:

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



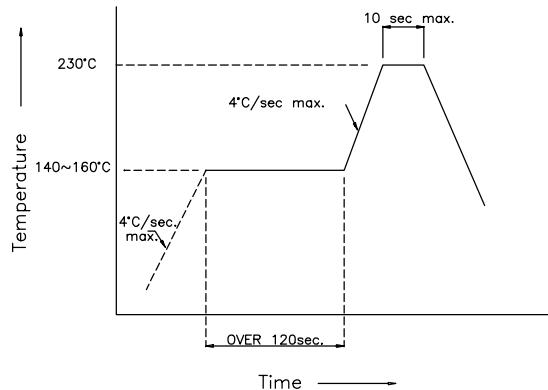
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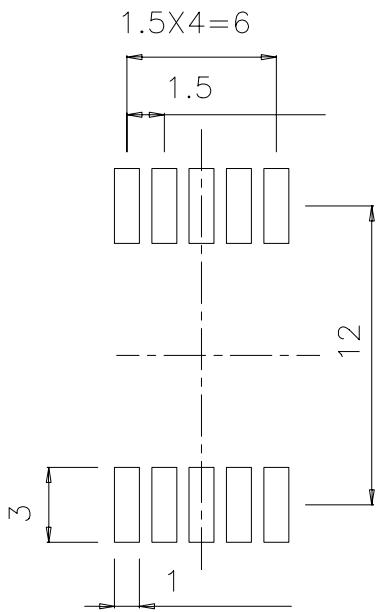
## APSA03-41EWA

### SMT Reflow Soldering Instruction

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



### Recommended Soldering Pattern (Units : mm)



**Tape Specification**  
(Units : mm)

