

Part Number: SA40-18SURKWA

Hyper Red

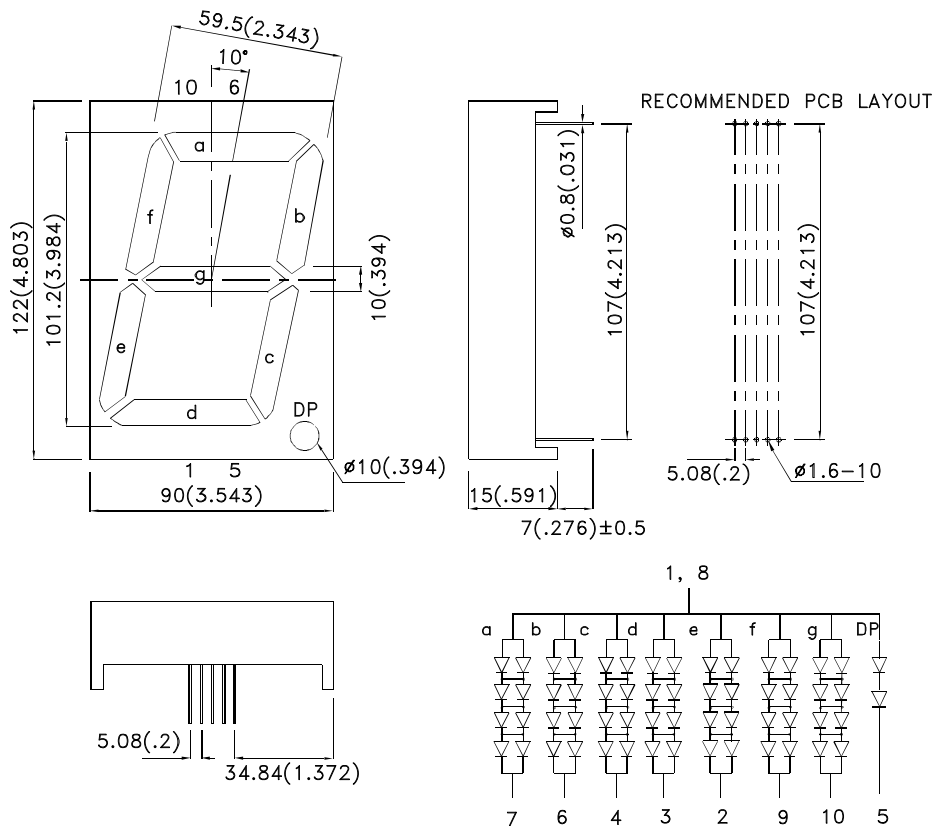
Features

- Large size.
- 4.0 inch digit height.
- Low current operation.
- Excellent character appearance.
- High light output.
- Easy mounting on P.C. boards or sockets.
- Mechanically rugged.
- Standard : gray face, white segment.
- RoHS compliant.

Description

The Hyper Red source color devices are made with Al-GaN on GaAs substrate 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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



Selection Guide

| Part No. | Dice | Lens Type | Iv (ucd) [1] @ 10mA | | Description |
|---------------|---------------------|----------------|------------------------|--------|---------------------------------|
| | | | Min. | Typ. | |
| SA40-18SURKWA | Hyper Red (AlGaInP) | WHITE DIFFUSED | 88000 | 250000 | Common Anode, Rt. Hand Decimal. |

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--|-----------|--------------|---------------|-------|--|
| λ_{peak} | Peak Wavelength | Hyper Red | 650 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | Hyper Red | 630 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Hyper Red | 28 | | nm | I _F =20mA |
| C | Capacitance | Hyper Red | 35 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage Per Segment Or (DP) | Hyper Red | 7.8 (3.9) | 10.0 (5.0) | V | I _F =20mA |
| I _R | Reverse Current Per Segment Or (DP) | Hyper Red | | 20 (10) | uA | V _R =20V (V _R =10V) |

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Hyper Red | Units |
|---|-----------------------|-------|
| Power dissipation Per Segment Or (DP) | 600 (150) | mW |
| DC Forward Current Per Segment Or (DP) | 60 (30) | mA |
| Peak Forward Current [1] Per Segment Or (DP) | 370 (185) | mA |
| Reverse Voltage Per Segment Or (DP) | 20 (10) | V |
| Operating / Storage Temperature | -40°C To +85°C | |
| Lead Solder Temperature[2] | 260°C For 3-5 Seconds | |

Notes:

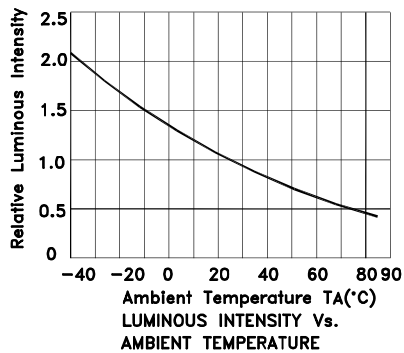
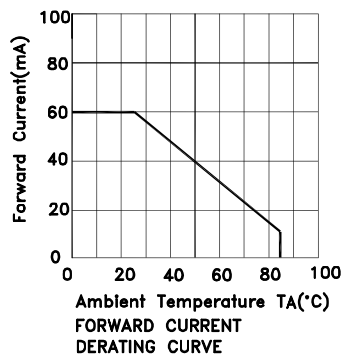
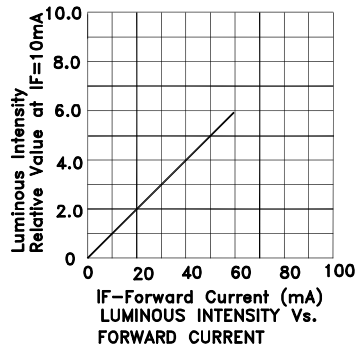
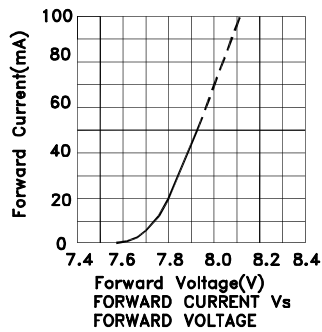
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

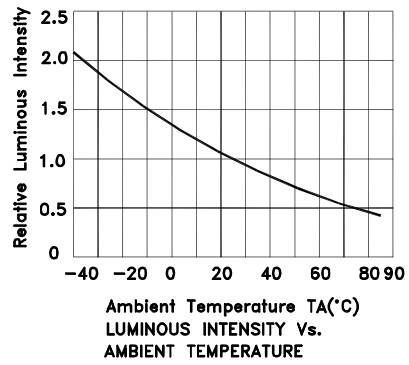
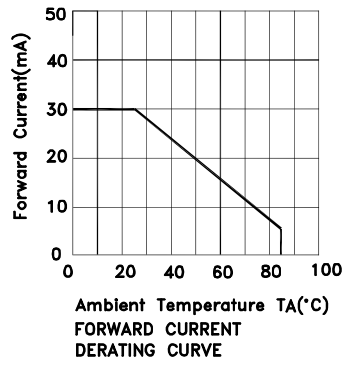
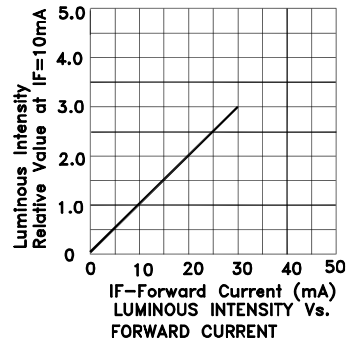
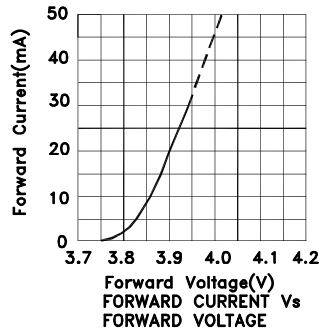
2. 2mm below package base.



Hyper Red

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PACKING & LABEL SPECIFICATIONS

SA40-18SURKWA

