

SA08-11EWA/GWA/YWA/SRWA
 SC08-11EWA/GWA/YWA/SRWA
 SA08-12EWA/GWA/YWA/SRWA
 SC08-12EWA/GWA/YWA/SRWA
 SA08-13EWA/GWA/YWA/SRWA
 SC08-13EWA/GWA/YWA/SRWA
 SA08-21EWA/GWA/YWA/SRWA
 SC08-21EWA/GWA/YWA/SRWA

Features

- 0.8 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- HIGH LIGHT OUTPUT.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- CATEGORIZED FOR LUMINOUS INTENSITY, YELLOW AND GREEN CATEGORIZED FOR COLOR.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE SEGMENT.

Description

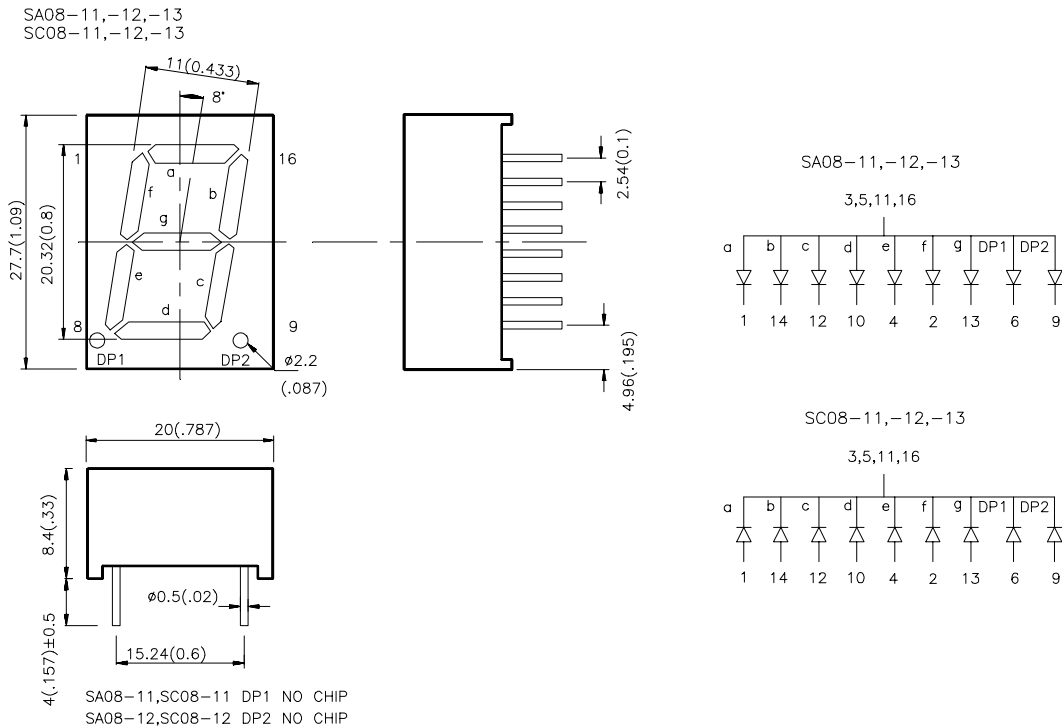
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions & Internal Circuit Diagram

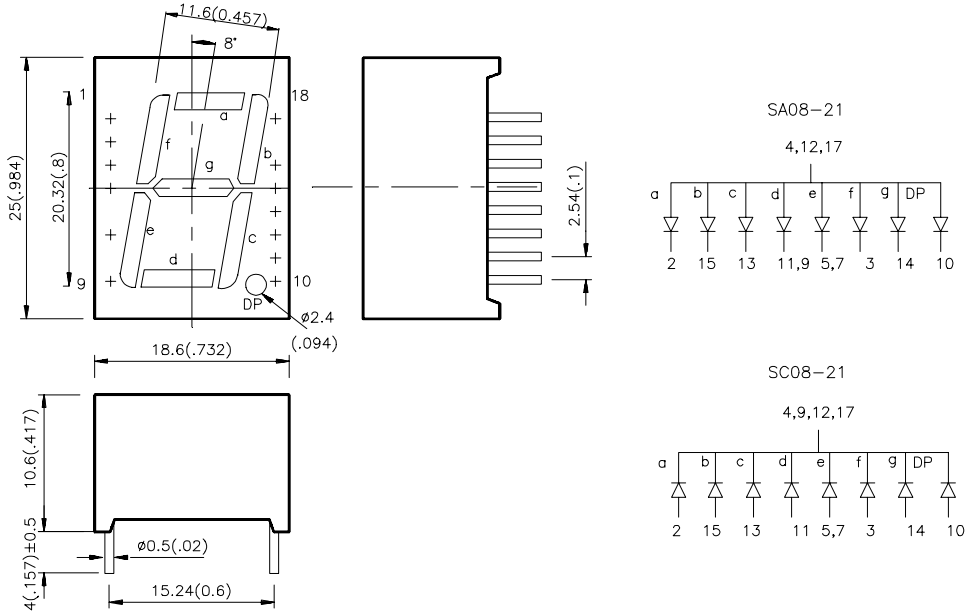


Notes:

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.

Package Dimensions & Internal Circuit Diagram

SA08-21
SC08-21



Notes:

- All dimensions are in millimeters (inches). Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
- Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Iv (ucd) @ 10 mA | | Description |
|--|------------------------------------|---------------------|-------|---------------------------------|
| | | Min. | Typ. | |
| SA08-11EWA SA08-12EWA SA08-13EWA SA08-21EWA | HIGH EFFICIENCY RED (GaAsP/GaP) | 1900 | 6400 | Common Anode, Rt Hand Decimal |
| Common Anode, Lt Hand Decimal | | | | |
| Common Anode, Rt & Lt Hand Decimal | | | | |
| Common Anode, Rt Hand Decimal | | | | |
| SC08-11EWA SC08-12EWA SC08-13EWA SC08-21EWA | HIGH EFFICIENCY RED (GaAsP/GaP) | 1900 | 6400 | Common Cathode, Rt Hand Decimal |
| Common Cathode, Lt Hand Decimal | | | | |
| Common Cathode, Rt & Lt Hand Decimal | | | | |
| Common Cathode, Rt Hand Decimal | | | | |
| SA08-11GWA SA08-12GWA SA08-13GWA SA08-21GWA | GREEN (GaP) | 3000 | 10500 | Common Anode, Rt Hand Decimal |
| Common Anode, Lt Hand Decimal | | | | |
| Common Anode, Rt & Lt Hand Decimal | | | | |
| Common Anode, Rt Hand Decimal | | | | |
| SC08-11GWA SC08-12GWA SC08-13GWA SC08-21GWA | GREEN (GaP) | 3000 | 10500 | Common Cathode, Rt Hand Decimal |
| Common Cathode, Lt Hand Decimal | | | | |
| Common Cathode, Rt & Lt Hand Decimal | | | | |
| Common Cathode, Rt Hand Decimal | | | | |
| SA08-11YWA SA08-12YWA SA08-13YWA SA08-21YWA | YELLOW (GaAsP/GaP) | 1900 | 4700 | Common Anode, Rt Hand Decimal |
| Common Anode, Lt Hand Decimal | | | | |
| Common Anode, Rt & Lt Hand Decimal | | | | |
| Common Anode, Rt Hand Decimal | | | | |
| SC08-11YWA SC08-12YWA SC08-13YWA SC08-21YWA | YELLOW (GaAsP/GaP) | 1900 | 4700 | Common Cathode, Rt Hand Decimal |
| Common Cathode, Lt Hand Decimal | | | | |
| Common Cathode, Rt & Lt Hand Decimal | | | | |
| Common Cathode, Rt Hand Decimal | | | | |
| SA08-11SRWA SA08-12SRWA SA08-13SRWA SA08-21SRWA | SUPER BRIGHT RED (GaAlAs) | 8000 | 24000 | Common Anode, Rt Hand Decimal |
| Common Anode, Lt Hand Decimal | | | | |
| Common Anode, Rt & Lt Hand Decimal | | | | |
| Common Anode, Rt Hand Decimal | | | | |
| SC08-11SRWA SC08-12SRWA SC08-13SRWA SC08-21SRWA | SUPER BRIGHT RED (GaAlAs) | 8000 | 24000 | Common Cathode, Rt Hand Decimal |
| Common Cathode, Lt Hand Decimal | | | | |
| Common Cathode, Rt & Lt Hand Decimal | | | | |
| Common Cathode, Rt Hand Decimal | | | | |

Electrical / Optical Characteristics at T_A=25°C

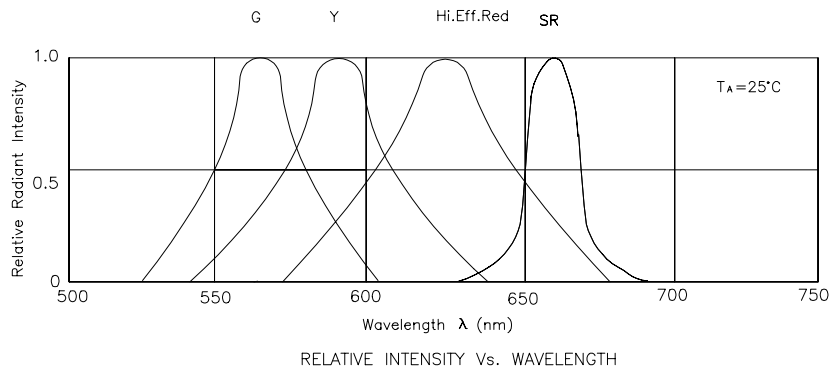
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|-------------------------|--|---------------------------|--------------------------|-------|-----------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Green Yellow Super Bright Red | 627 565 590 660 | | nm | IF=20mA |
| λ_D | Dominate Wavelength | High Efficiency Red Green Yellow Super Bright Red | 625 568 588 640 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | High Efficiency Red Green Yellow Super Bright Red | 45 30 35 20 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red Green Yellow Super Bright Red | 15 15 20 45 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | High Efficiency Red Green Yellow Super Bright Red | 2.0 2.2 2.1 1.85 | 2.5 2.5 2.5 2.5 | V | IF=20mA |
| I _R | Reverse Current | All | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

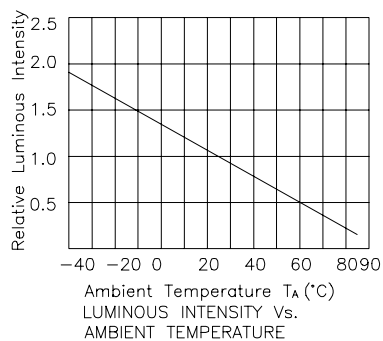
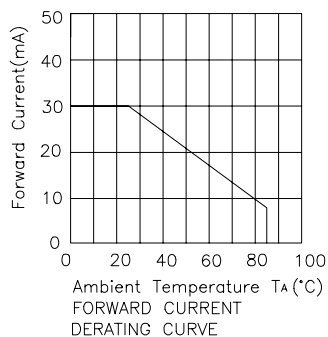
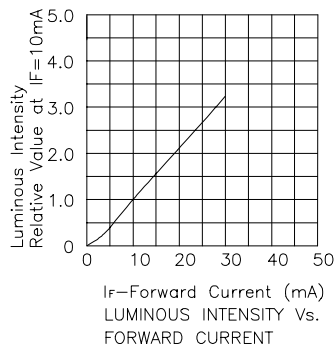
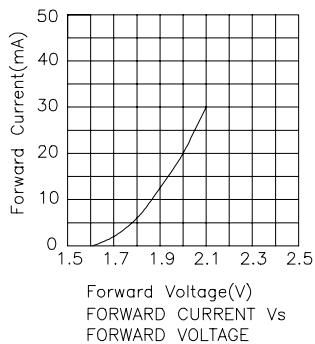
| Parameter | High Efficiency Red | Green | Yellow | Super Bright Red | Units |
|-------------------------------|---------------------|-------|--------|------------------|-------|
| Power dissipation | 105 | 105 | 105 | 100 | mW |
| DC Forward Current | 30 | 25 | 30 | 30 | mA |
| Peak Forward Current [1] | 160 | 140 | 140 | 155 | mA |
| Reverse Voltage | 5 | 5 | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | | | | |
| Lead Solder Temperature [2] | 260°C For 5 Seconds | | | | |

Notes:

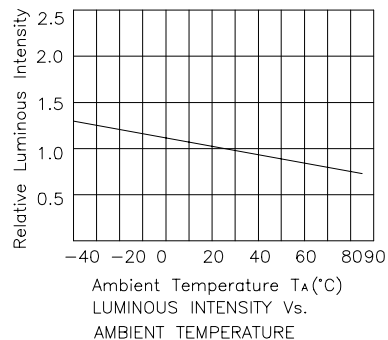
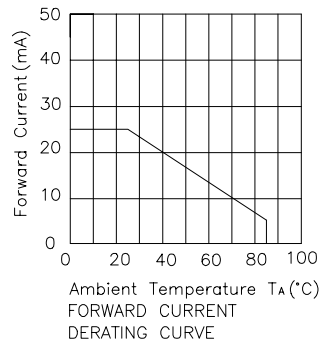
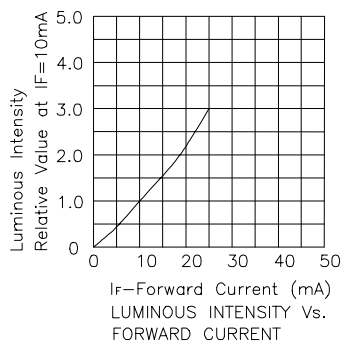
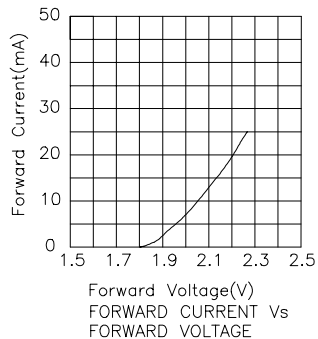
- 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



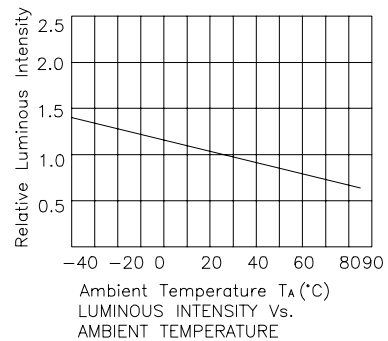
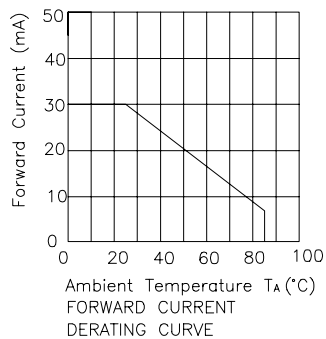
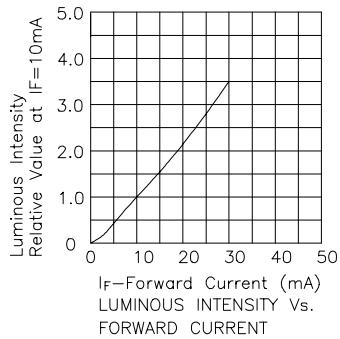
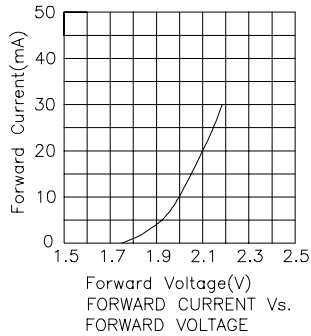
High Efficiency Red



Green



Yellow



Super Bright Red

