

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

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

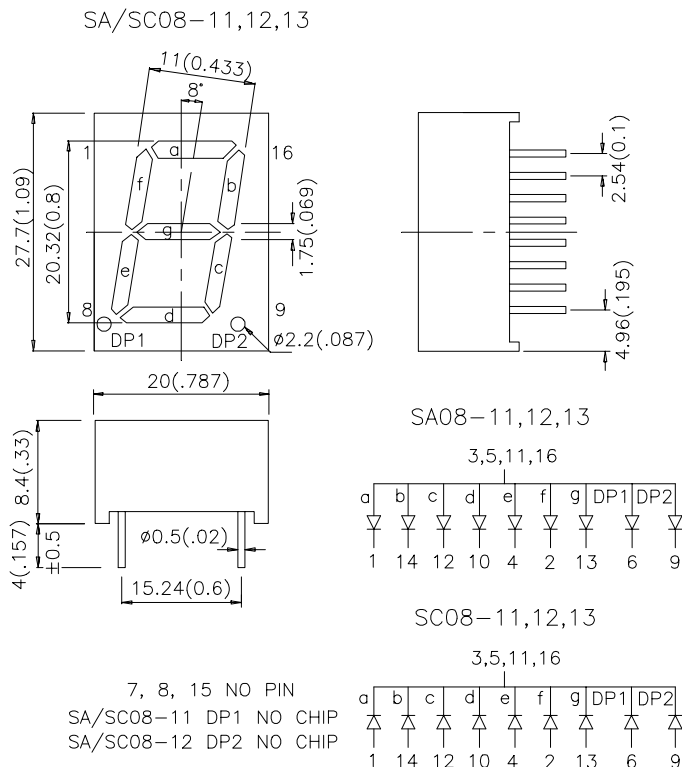
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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

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

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

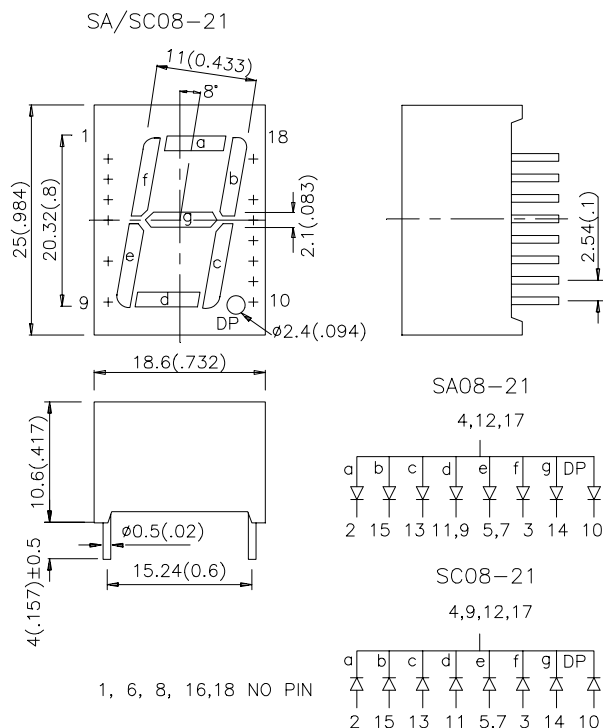
Package Dimensions & Internal Circuit Diagram



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



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	Iv (ucd) @ 10 mA		Description
			Min.	Typ.	
SA08-11EWA SA08-12EWA SA08-13EWA SA08-21EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	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					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)	WHITE DIFFUSED	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					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)	WHITE DIFFUSED	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					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)	WHITE DIFFUSED	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					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

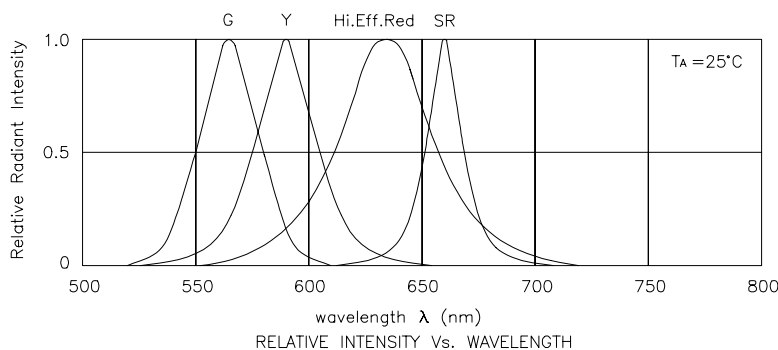
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Super Bright Red Yellow Green	627 660 590 565		nm	I _F = 20mA
λ_D	Dominate Wavelength	High Efficiency Red Super Bright Red Yellow Green	625 640 588 568		nm	I _F = 20mA
$\Delta\lambda_{1/2}$	Spectral Line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

Absolute Maximum Ratings at T_A=25°C

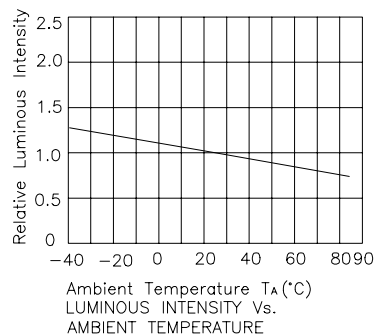
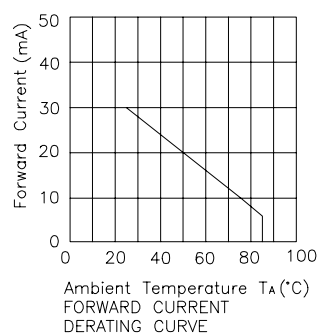
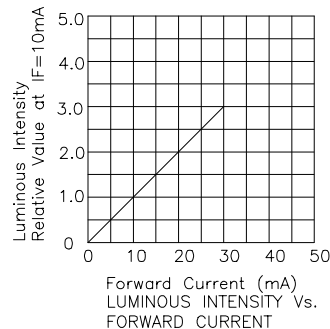
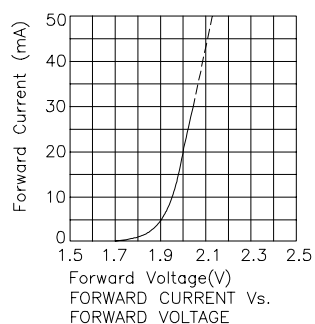
Parameter	High Efficiency Red	Super Bright Red	Yellow	Green	Units
Power dissipation	105	100	105	105	mW
DC Forward Current	30	30	30	25	mA
Peak Forward Current [1]	160	155	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	260°C For 5 Seconds				

Notes:

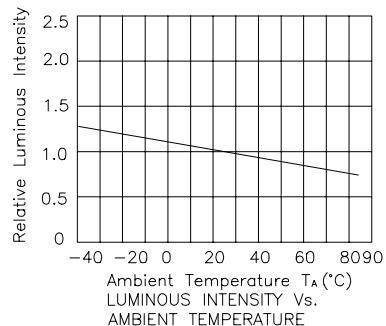
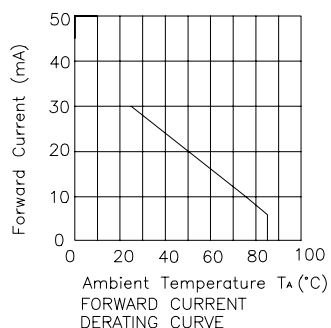
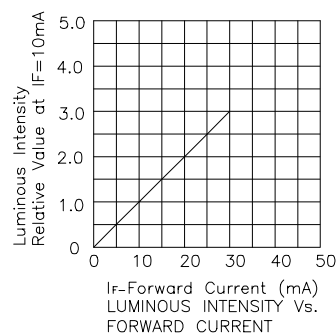
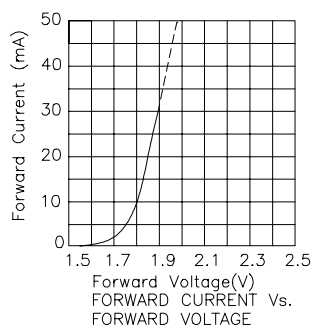
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



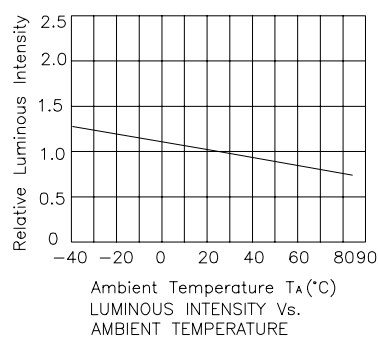
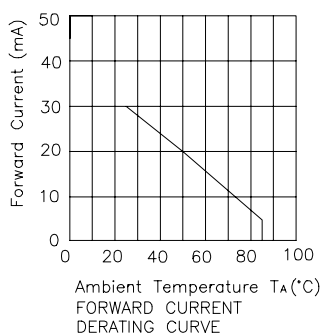
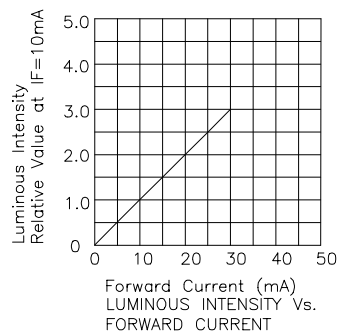
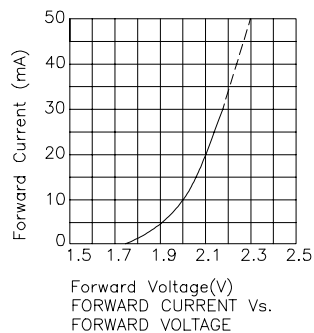
High Efficiency Red



Super Bright Red



Yellow



Green

