

SA10-11EWA/SRWA/YWA/GWA
 SC10-11EWA/SRWA/YWA/GWA
 SA10-21EWA/SRWA/YWA/GWA
 SC10-21EWA/SRWA/YWA/GWA

Features

- 1.0 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

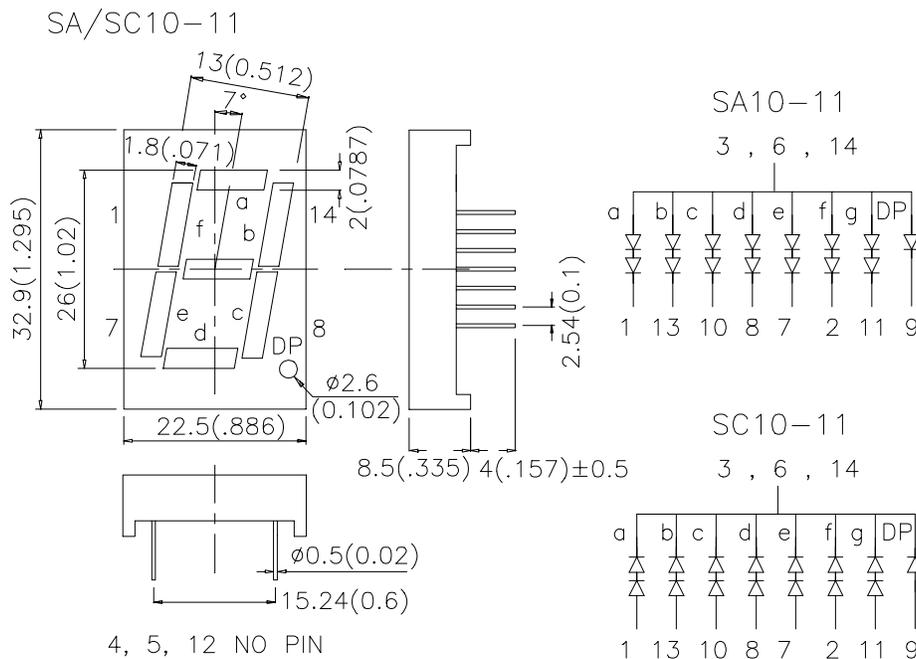
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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.

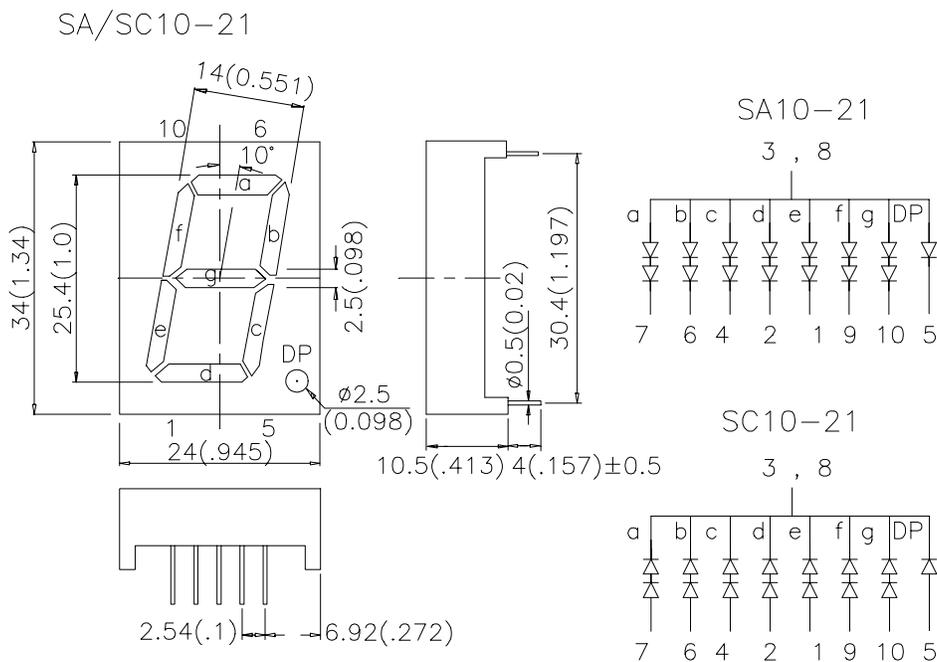
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

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



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1. All dimensions are in millimeters (inches), Tolerance is ± 0.25 (0.01") unless otherwise noted.
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Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) @ 10 mA		Description
			Min.	Typ.	
SA10-11EWA SA10-21EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	4700	16000	Common Anode.Rt.Hand Decimal
SC10-11EWA SC10-21EWA					Common Cathode.Rt.Hand Decimal
SA10-11SRWA SA10-21SRWA	SUPER BRIGHT RED (GaAlAs)	WHITE DIFFUSED	18000	60000	Common Anode.Rt.Hand Decimal
SC10-11SRWA SC10-21SRWA					Common Cathode.Rt.Hand Decimal
SA10-11YWA SA10-21YWA	YELLOW (GaAsP/GaP)	WHITE DIFFUSED	3000	10500	Common Anode.Rt.Hand Decimal
SC10-11YWA SC10-21YWA					Common Cathode.Rt.Hand Decimal
SA10-11GWA SA10-21GWA	GREEN (GaP)	WHITE DIFFUSED	8000	24000	Common Anode.Rt.Hand Decimal
SC10-11GWA SC10-21GWA					Common Cathode.Rt.Hand Decimal

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

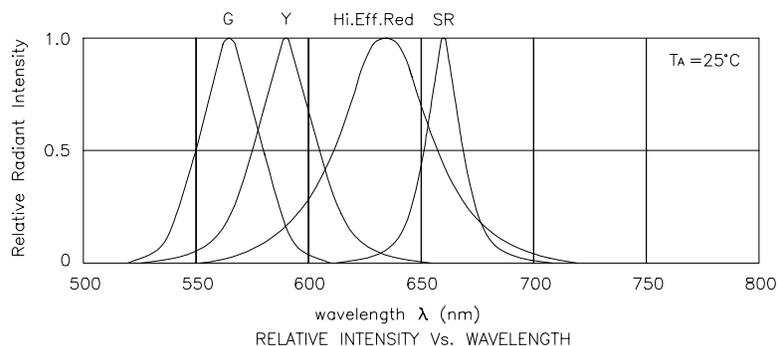
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Super Bright Red Yellow Green	627 660 590 565		nm	$I_F=20\text{mA}$
λ_D	Dominate Wavelength	High Efficiency Red Super Bright Red Yellow Green	625 640 588 568		nm	$I_F=20\text{mA}$
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Super Bright Red Yellow Green	45 20 35 30		nm	$I_F=20\text{mA}$
C	Capacitance	High Efficiency Red Super Bright Red Yellow Green	15 45 20 15		pF	$V_F=0\text{V}; f=1\text{MHz}$
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	$I_F=20\text{mA}$
I_R	Reverse Current	All		10	μA	$V_R = 5\text{V}$

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

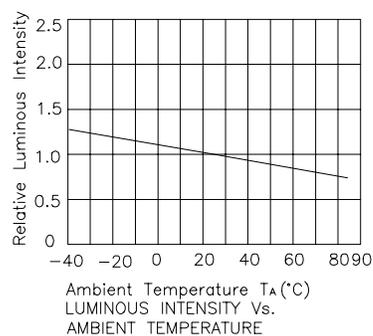
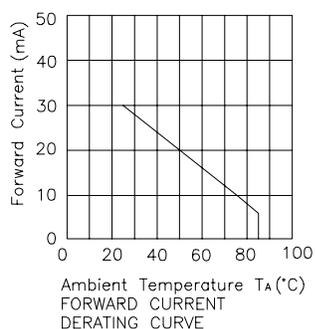
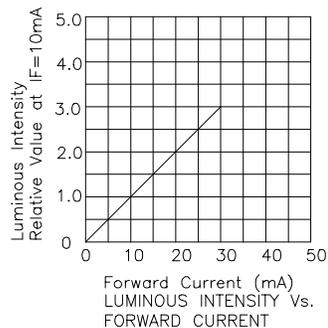
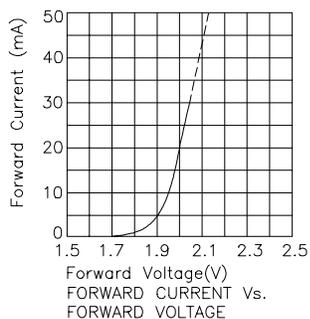
Parameter	High Efficiency Red	Super Bright Red	Yellow	Green	Units
Power dissipation	105	100	105	105	mW
DC Forward Current	30	30	30	25	mA
Peak Forward Current [1]	160	155	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	260°C For 5 Seconds				

Notes:

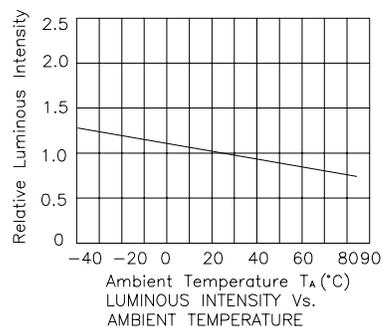
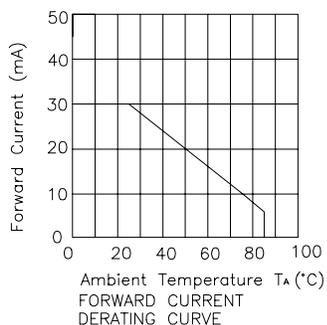
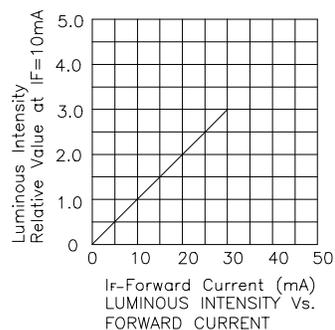
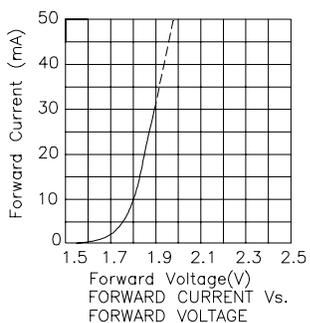
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



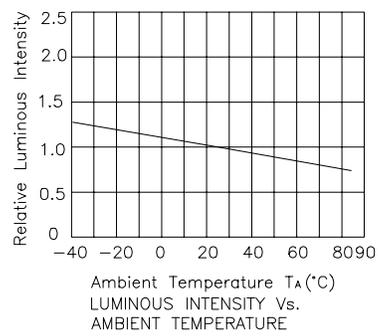
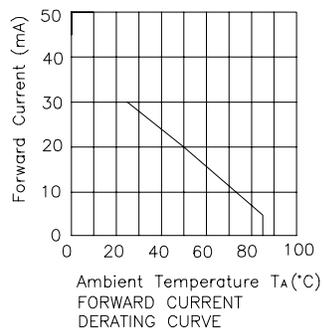
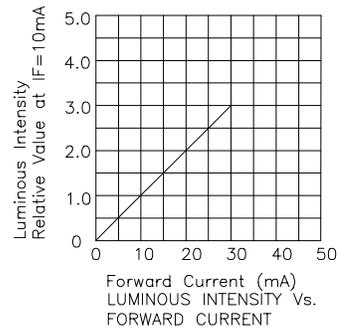
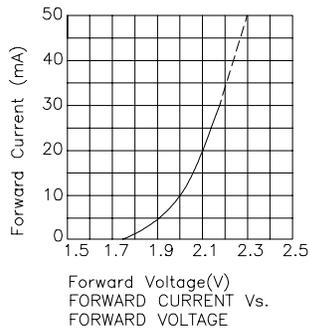
High Efficiency Red



Super Bright Red



Yellow



Green

