Kingbright

14.2mm (0.50INCH) SEVEN SEGMENT DISPLAY

SC50-21EWA HIGH EFFICIENCY RED

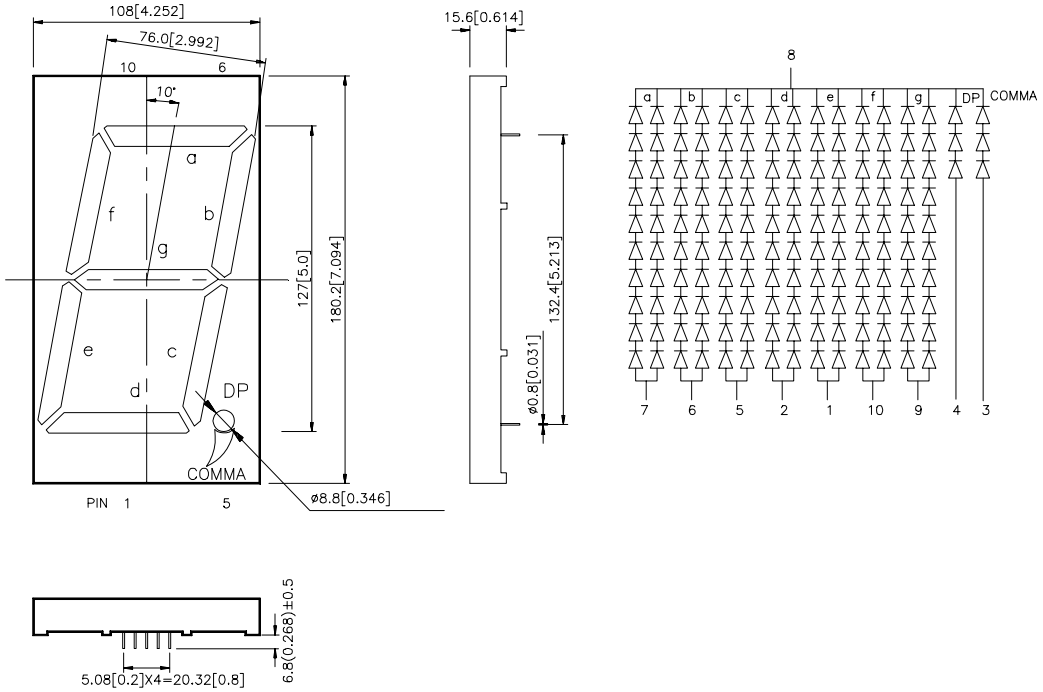
Features

- 0.50 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- 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.

Package Dimensions & Internal Circuit Diagram



Notes:
1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
2. Specifications are subject to change whitout notice.

Selection Guide

Part No.	Dice	Iv (ucd) @ 10 mA		Description
		Min.	Typ.	
SC50-21EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	8000	24000	Common Cathode, Rt. Hand Decimal

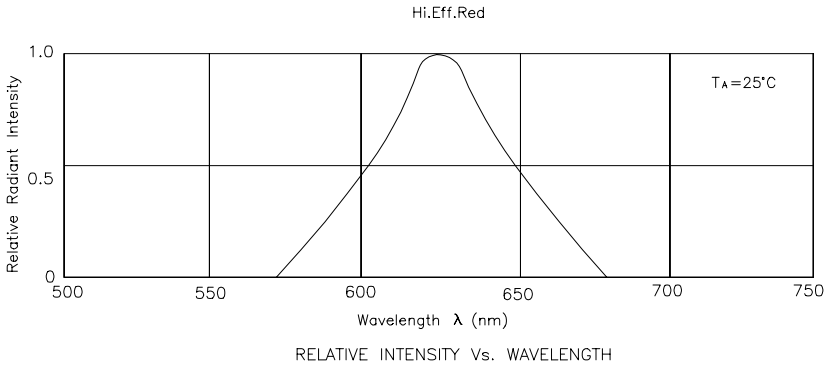
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λ D	Dominate Wavelength	High Efficiency Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	High Efficiency Red	45		nm	IF=20mA
C	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
I_R	Reverse Current	High Efficiency Red		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

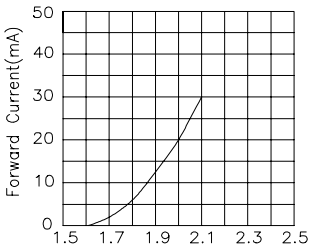
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

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

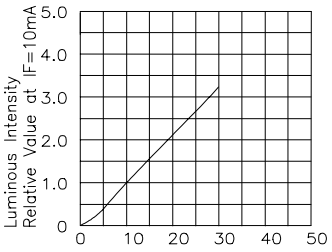


RELATIVE INTENSITY Vs. WAVELENGTH

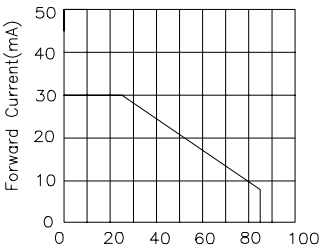
High Efficiency Red SC50-21EWA



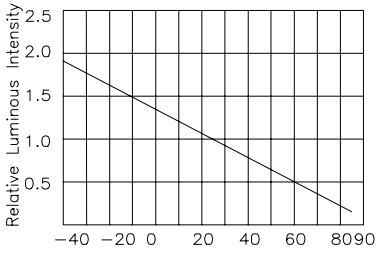
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE