

Part Number: SC50-31SURKWA

Hyper Red

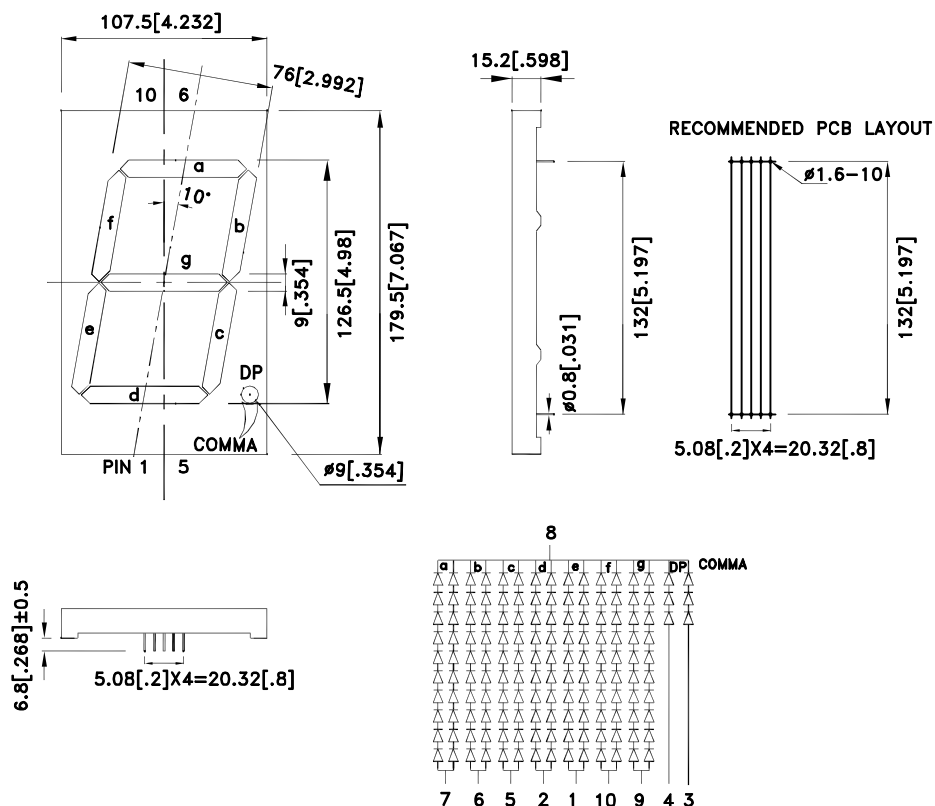
Features

- 5.0 inch digit height.
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. boards or sockets.
- Categorized for luminous intensity.
- Mechanically rugged.
- Standard : gray face,white segment.
- RoHS compliant.

Description

The Hyper Red source color devices are made with AlGaInP 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.	
SC50-31SURKWA	Hyper Red (AlGaInP)	WHITE DIFFUSED	255000	640000	Common Cathode,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 and Comma)	Hyper Red	19.5 (5.85)	25 (7.5)	V	I _F =20mA
I _R	Reverse Current Per Segment or (DP and Comma)	Hyper Red		20 (10)	uA	V _R =50V (V _R =15V)

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

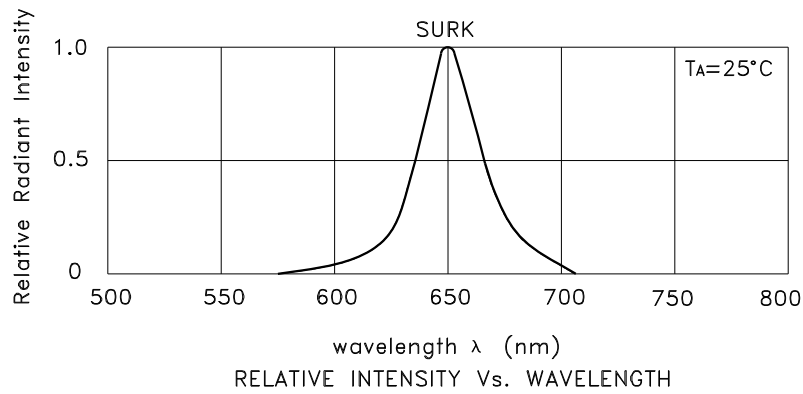
Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units
Power dissipation Per Segment or (DP and Comma)	1500 (225)	mW
DC Forward Current Per Segment or (DP and Comma)	60 (30)	mA
Peak Forward Current [1] Per Segment or (DP and Comma)	370 (185)	mA
Reverse Voltage Per Segment or (DP and Comma)	50 (15)	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

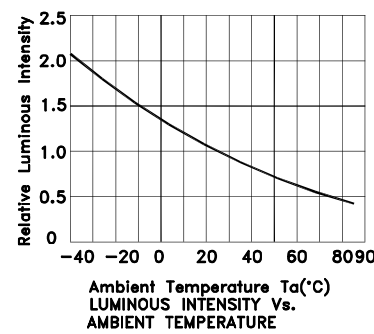
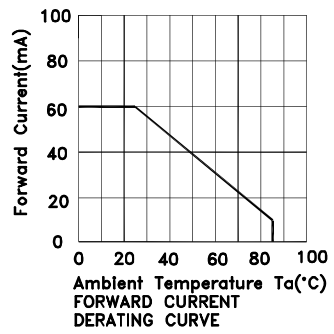
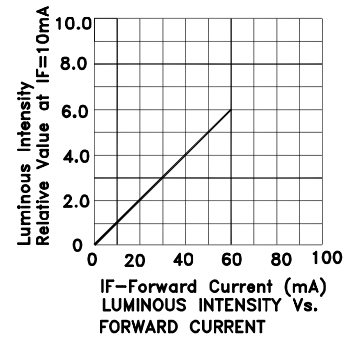
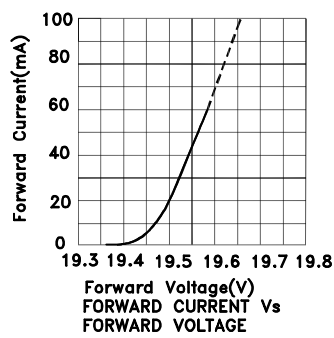
Notes:

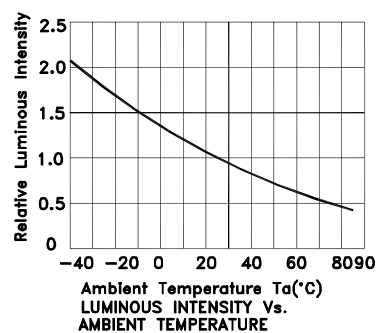
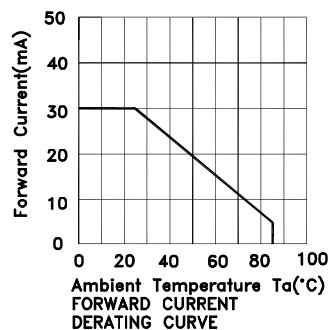
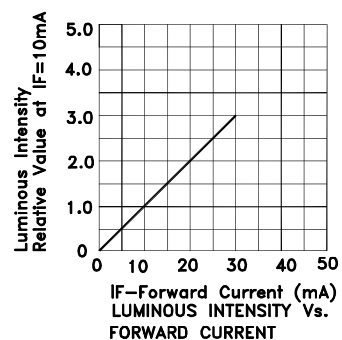
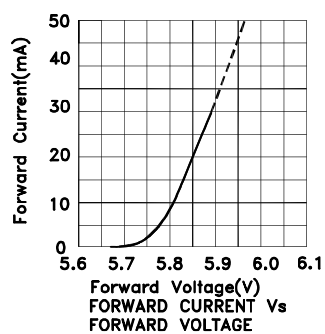
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.



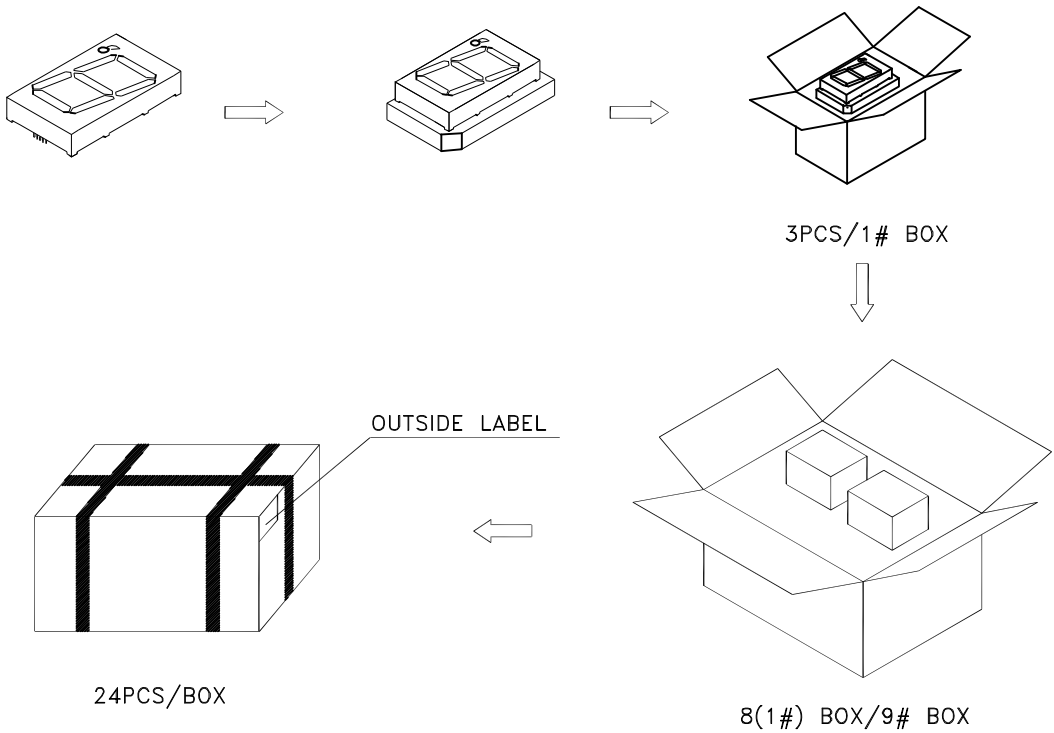
Hyper Red SC50-31SURKWA





PACKING & LABEL SPECIFICATIONS

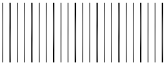
SC50-31SURKWA



Inside Label On 1#BOX

Kingbright	TYPE: Sx50-31xxx	PASSED XX XX XX FQCX	Date
QTY:3 PCS	CODE: xx		
		Number OF FQC	
XXXXXXXXXX-XXXX		RoHS Compliant	
LOT NO.			

Outside Label On Box

XXXXXX		Bin Code	Number OF QA
Sx50-31xxx			
24	PCS	XX	Date
		PASSED XX XX XX	RoHS Compliant