Kingbright

57mm (2.3INCH) SINGLE DIGIT NUMERIC DISPLAY

Part Number: SC23-11EWA High Efficiency Red

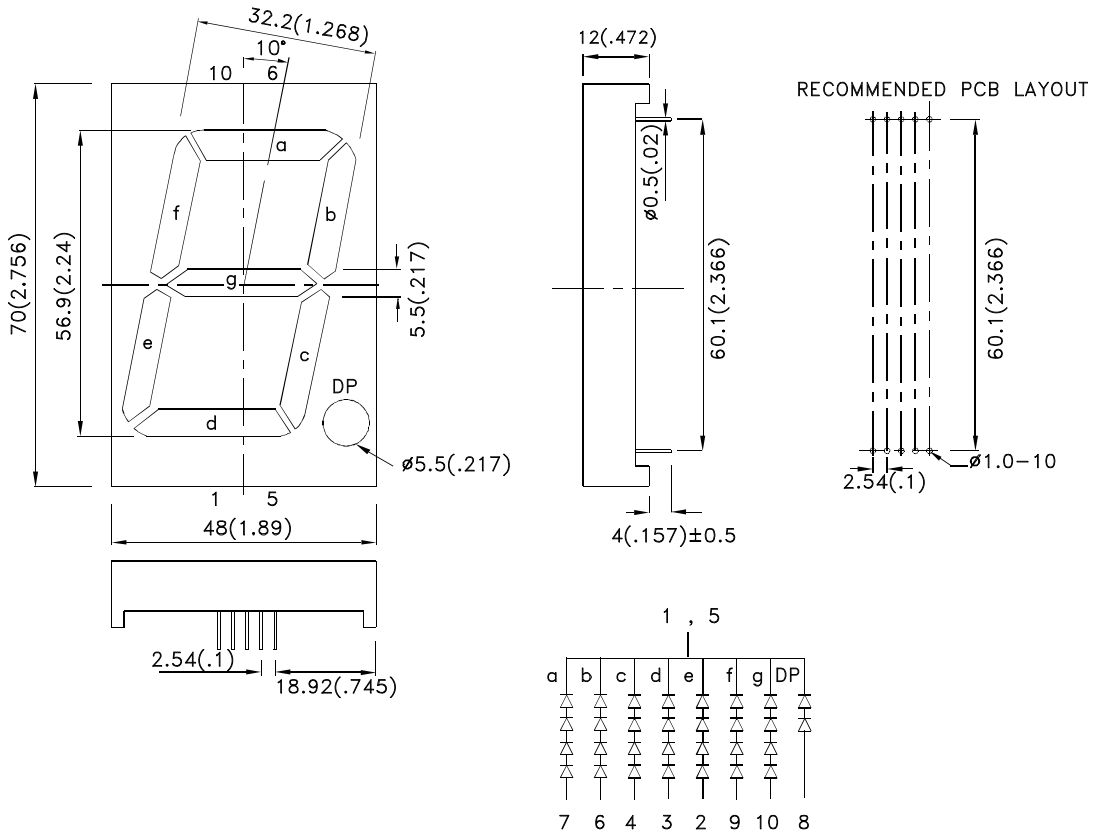
Features

- 2.3 inch digit height.
- Low current operation.
- Excellent character appearance.
- High light output.
- Easy mounting on P.C. boards or sockets.
- Multicolor available.
- Mechanically rugged.
- Standard : gray face, white segment.
- RoHS compliant.

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 without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
SC23-11EWA	High Efficiency Red (GaAsP/GaP)	WHITE DIFFUSED	12000	55500	Common Cathode. Rt. Hand Decimal

Note:
1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

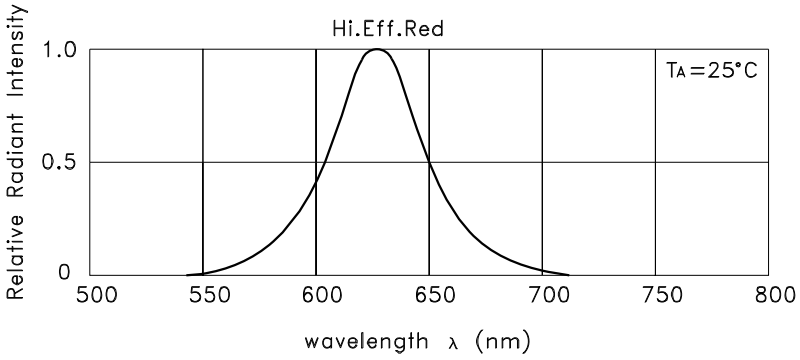
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	I_F=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	625		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	I_F=20mA
C	Capacitance	High Efficiency Red	15		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage Per Segment Or (DP)	High Efficiency Red	8.0 (4.0)	10.0 (5.0)	V	I_F=20mA
I_R	Reverse Current Per Segment Or (DP)	High Efficiency Red		10 (10)	uA	V_R=20V (V_R=10V)

Notes:
1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

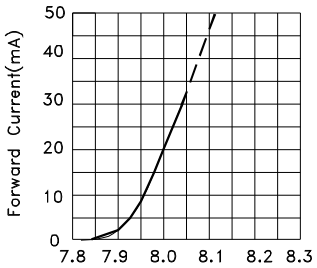
Parameter	High Efficiency Red	Units
Power dissipation Per Segment Or (DP)	300 (150)	mW
DC Forward Current Per Segment Or (DP)	30 (30)	mA
Peak Forward Current [1] Per Segment Or (DP)	160 (160)	mA
Reverse Voltage Per Segment Or (DP)	20 (10)	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

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

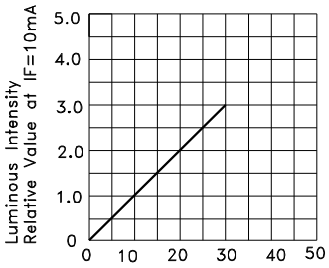


RELATIVE INTENSITY Vs. WAVELENGTH

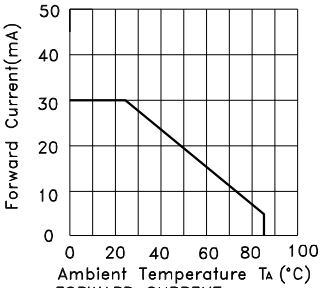
High Efficiency Red **SC23-11EWA**



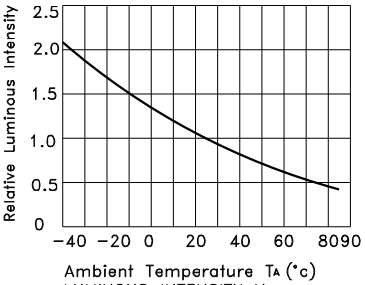
FORWARD CURRENT Vs
FORWARD VOLTAGE



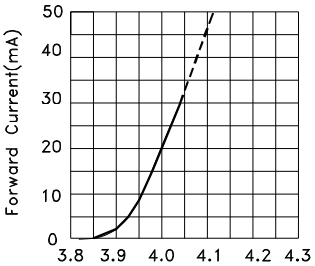
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



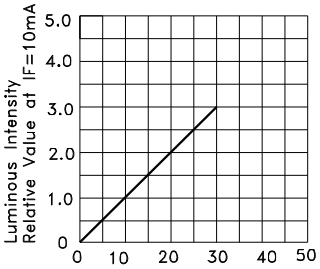
FORWARD CURRENT
DERATING CURVE



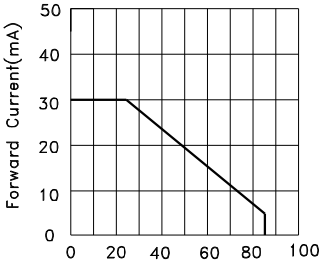
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



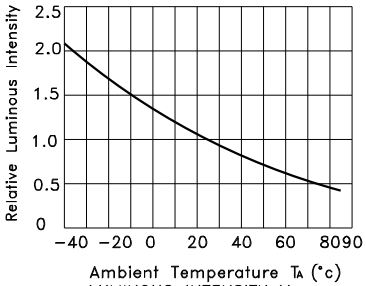
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

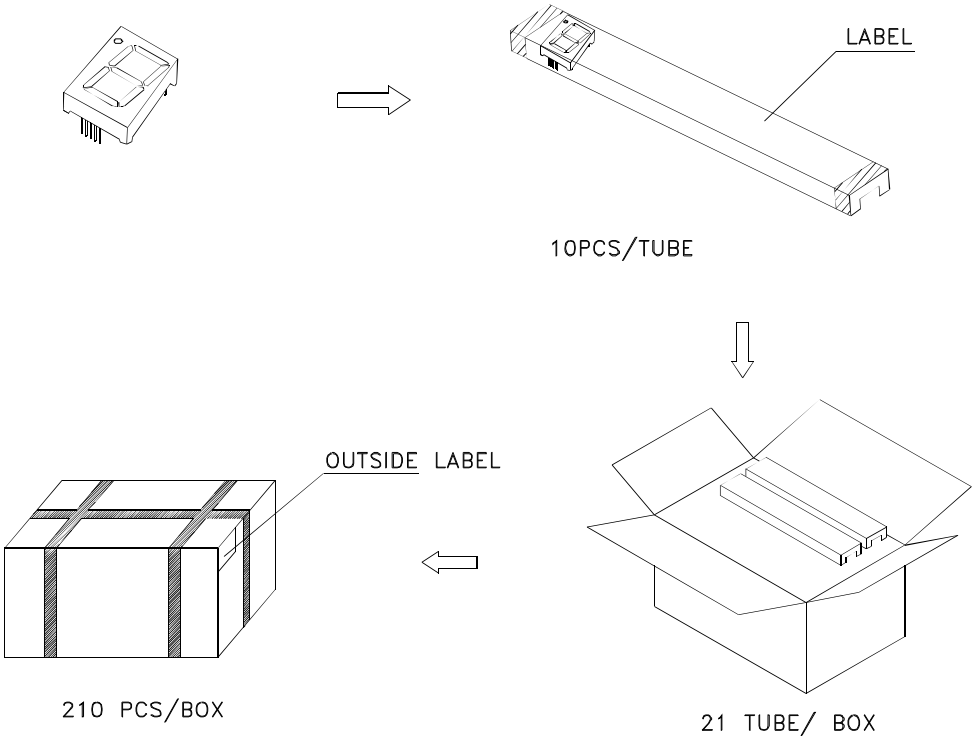


FORWARD CURRENT
DERATING CURVE

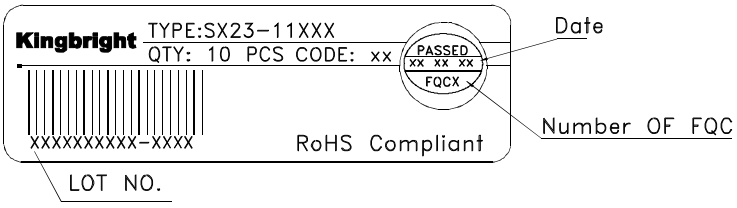
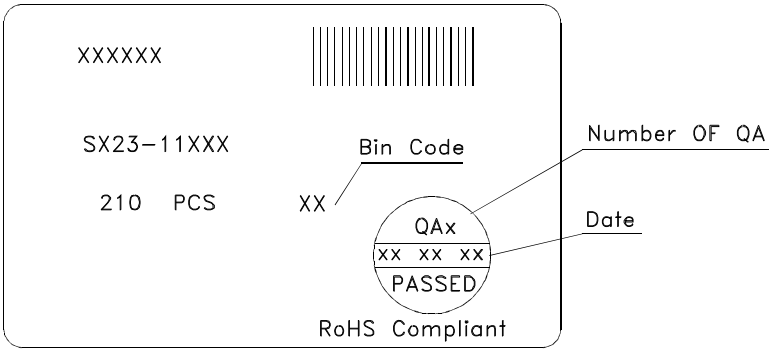


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

PACKING & LABEL SPECIFICATIONS **SC23-11EWA**



Inside Label Paste On The IC-tube



Outside Label Paste On The Box