

Hyper Red

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

The Hyper Red source color devices are made with Al-GaNp on GaAs substrate Light Emitting Diode.

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.	
PSC23-11SURKWA	Hyper Red (AlGaInP)	White Diffused	31000	73000	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	If=20mA
λ D[1]	Dominant Wavelength		Hyper Red	630		nm	If=20mA
$\Delta\lambda$ 1/2	Spectral Line Half-width		Hyper Red	28		nm	If=20mA
C	Capacitance		Hyper Red	35		pF	Vf=0V;f=1MHz
Vf[2]	Forward Voltage	A1,A2,D1,D2,P,K	Hyper Red	3.9	5.0	V	If=20mA
		B,C,E,F,G,H,J,L,M,N					
		DP		1.95	2.5		
Ir	Reverse Current	A1,A2,D1,D2,P,K	Hyper Red		10 20 10	uA	VR = 10V VR = 10V VR = 5V
		B,C,E,F,G,H,J,L,M,N					
		DP					

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

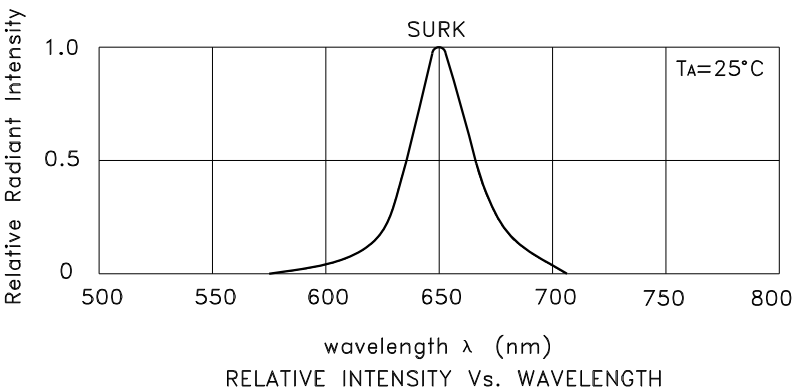
Absolute Maximum Ratings at TA=25°C

Parameter		Super Bright Orange	Units
Power dissipation	A1,A2,D1,D2,P,K	150	mW
	B,C,E,F,G,H,J,L,M,N(DP)	300(75)	
DC Forward Current	A1,A2,D1,D2,P,K	30	mA
	B,C,E,F,G,H,J,L,M,N(DP)	60(30)	
Peak Forward Current [1]	A1,A2,D1,D2,P,K	185	mA
	B,C,E,F,G,H,J,L,M,N(DP)	370(185)	
Reverse Voltage	A1,A2,D1,D2,P,K	10	V
	B,C,E,F,G,H,J,L,M,N(DP)	10(5)	
Operating / Storage Temperature		-40°C To +85°C	
Lead Solder Temperature [2]		260°C For 3 Seconds	

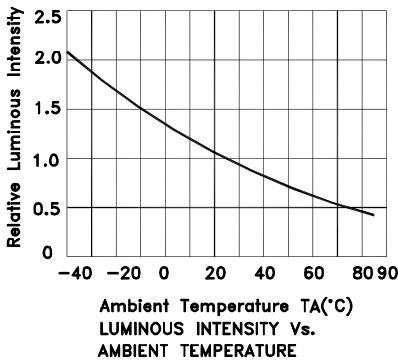
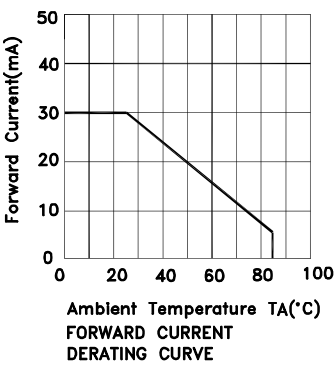
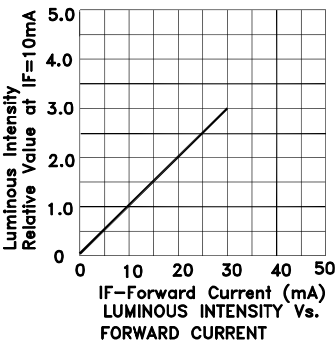
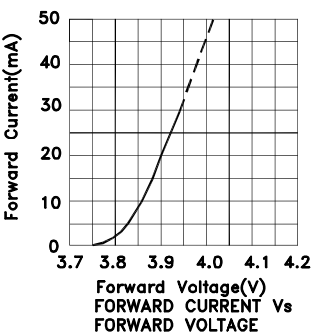
Notes:

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

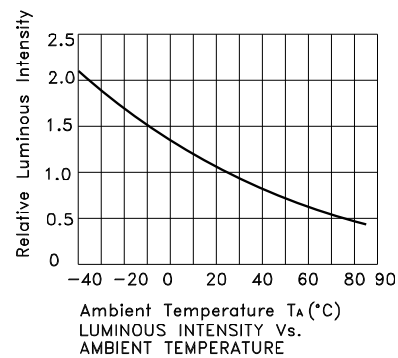
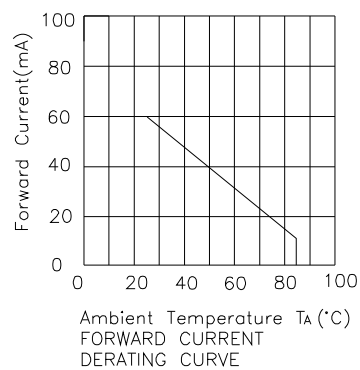
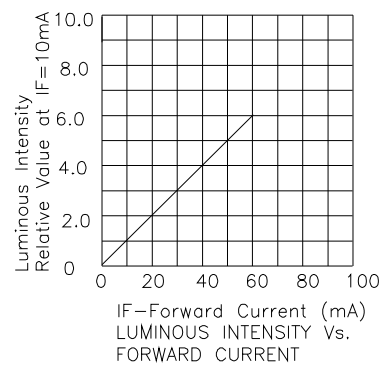
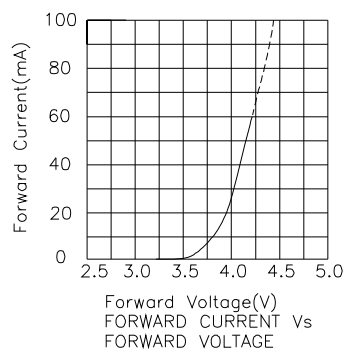
2. 2mm below package base.



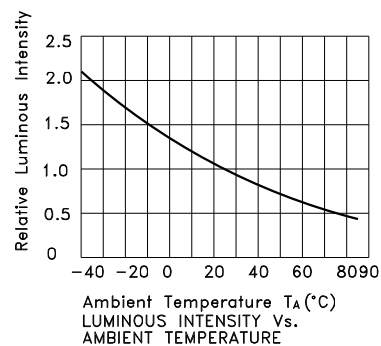
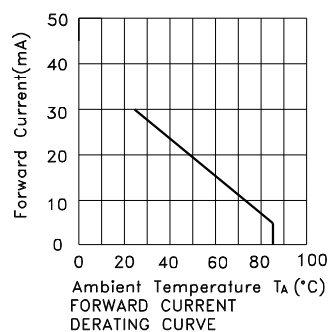
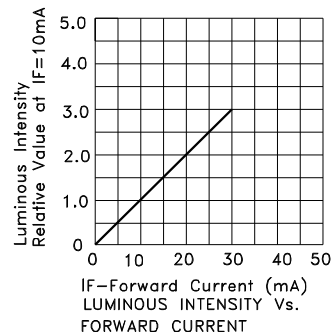
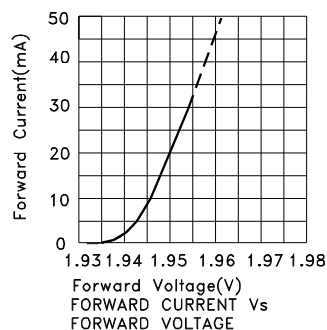
Hyper Red PSC23-11SURKWA



Note: the curves are on the segment a1,a2,d1,d2,p,k.



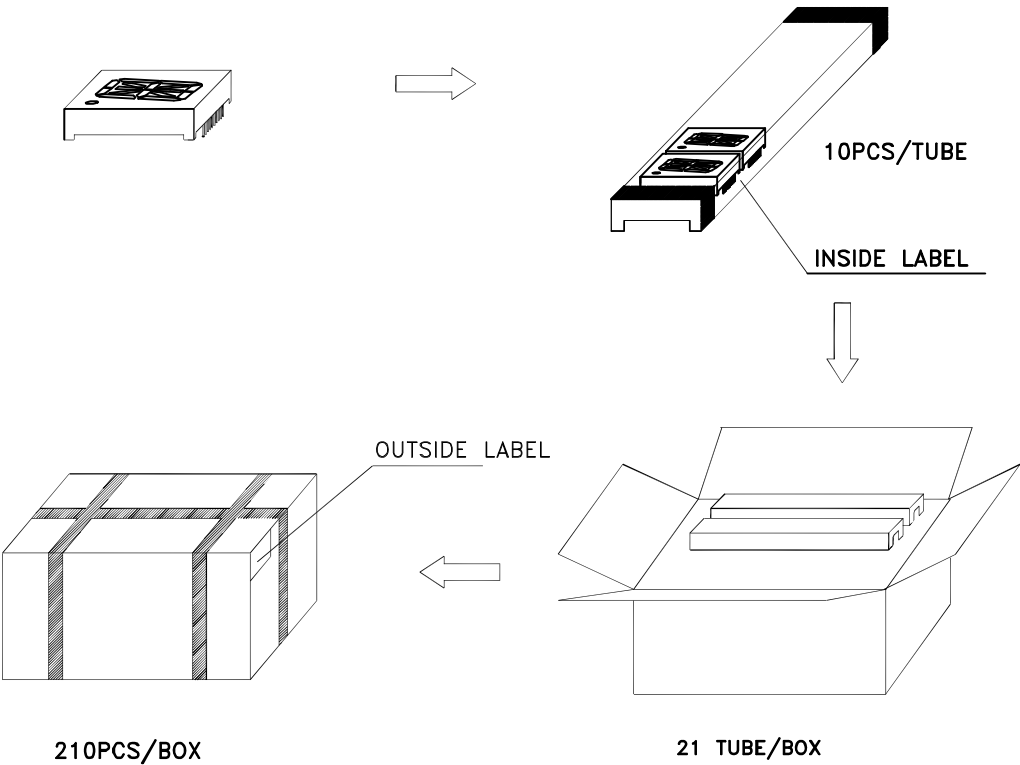
Note:the curves are on the segment b,c,e,f,g,h,j,l,m,n.



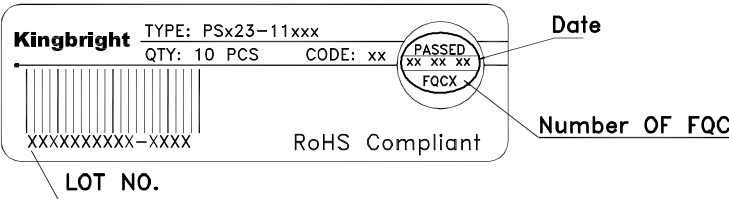
Note:the curves are on the DP.

PACKING & LABEL SPECIFICATIONS

PSC23-11SURKWA



Inside Label On IC-tube



Outside Label On Box

