

PRELIMINARY SPEC

WP59SURKSGC

HYPER RED
SUPER BRIGHT GREEN

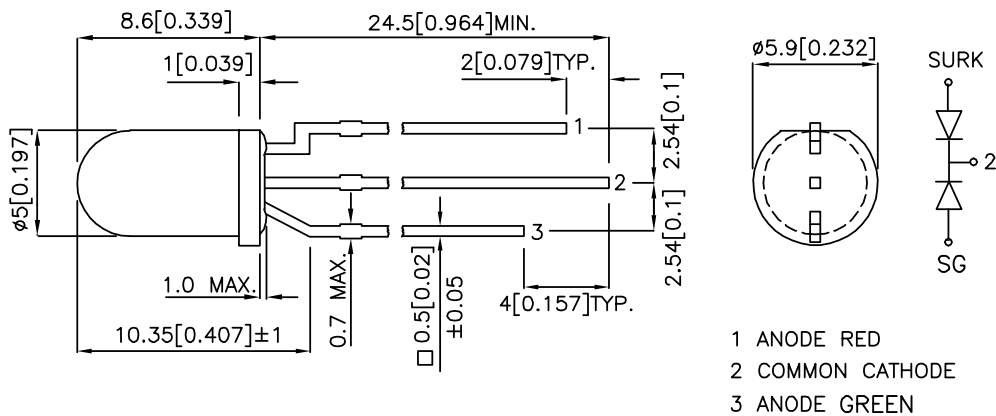
Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- 3 LEADS WITH ONE COMMON LEAD.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode. The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
WP59SURKSGC	HYPER RED (InGaAlP)	WATER CLEAR	480	1100	24°
	SUPER BRIGHT GREEN (GaP)		70	200	

Note:

1. $\theta 1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red Super Bright Green	650 565		nm	I _F =20mA
λ_D	Dominant Wavelength	Hyper Red Super Bright Green	635 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red Super Bright Green	28 30		nm	I _F =20mA
C	Capacitance	Hyper Red Super Bright Green	35 15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Hyper Red Super Bright Green	1.95 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	All		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

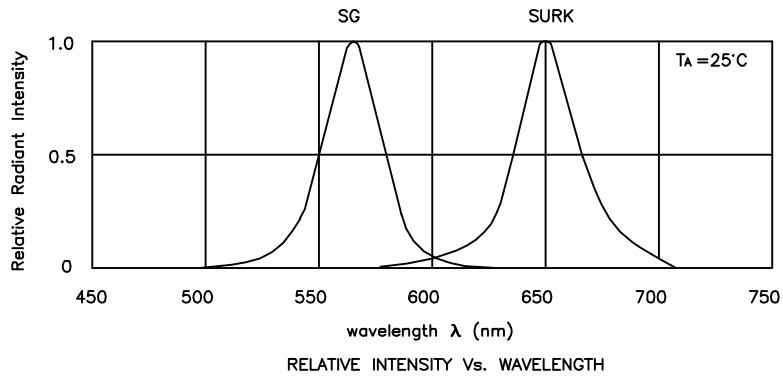
Parameter	Hyper Red	Super Bright Green	Units
Power dissipation	170	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	185	140	mA
Reverse Voltage	5	5	V
Operating/storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

Notes:

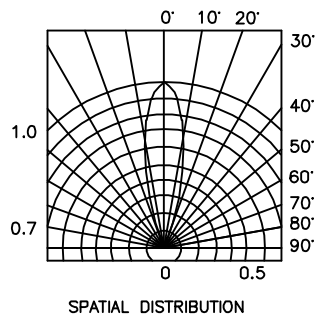
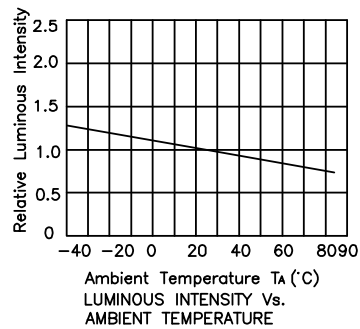
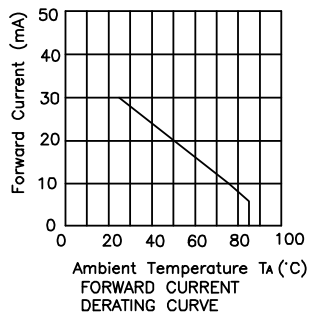
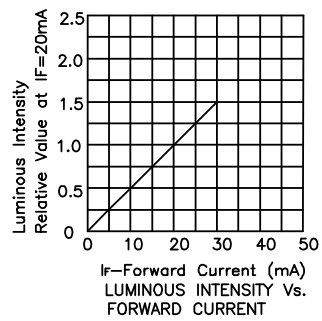
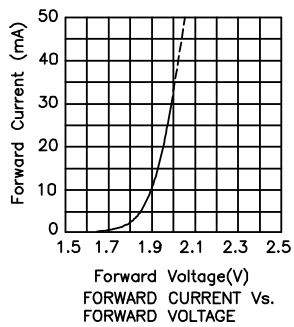
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.

3. 5mm below package base.

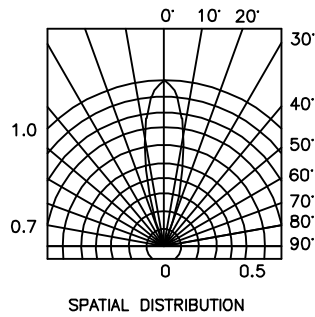
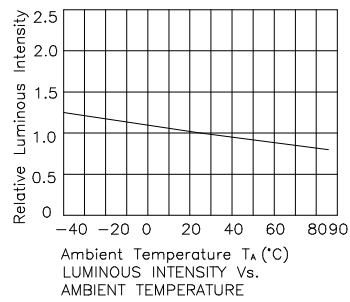
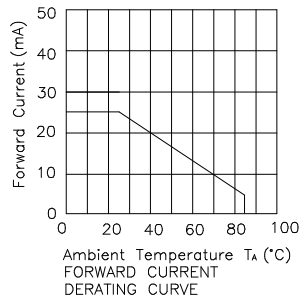
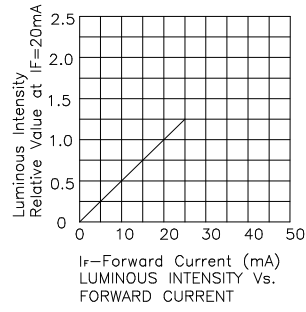
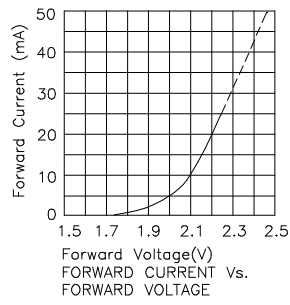


WP59SURKSGC Hyper Red



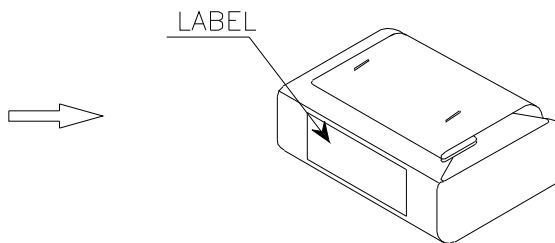
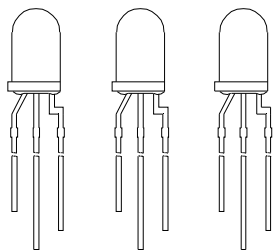
Kingbright

Super Bright Green



PACKING & LABEL SPECIFICATIONS

WP59SURKSGC

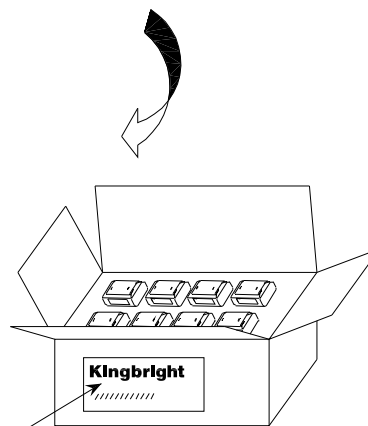


500PCS / BAG




28K / 9# BOX

OUTSIDE LABEL



14K / 5# BOX

OUTSIDE LABEL

Kingbright	
Q.C.	QC xxx-xx-2005 PASSED
TYPE NO : WP59XXX	
QUANTITY : 500 pcs	
S/N : XXX	CODE: XX
LOT NO: 	
RoHS Compliant	

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.