



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-59SURKSGC	HYPERS RED (InGaAlP)	WATER CLEAR	900	1600	24°
	SUPER BRIGHT GREEN(GaP)		70	200	

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

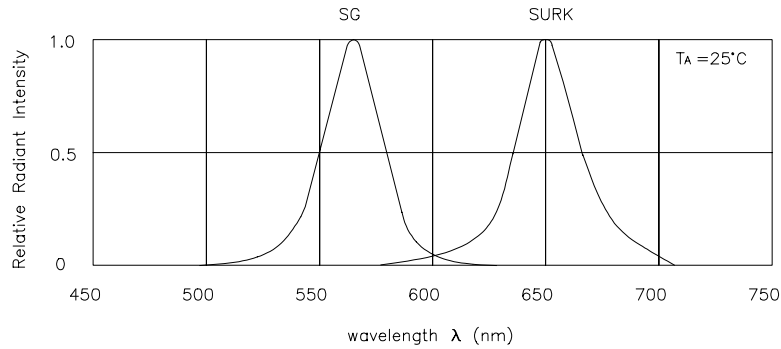
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red Super Bright Green	650 565		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	Hyper Red Super Bright Green	635 568		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Hyper Red Super Bright Green	28 30		nm	I <sub>F</sub> =20mA
C	Capacitance	Hyper Red Super Bright Green	35 15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Hyper Red Super Bright Green	1.95 2.2	2.5 2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	All		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=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		V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 5 Seconds		

Notes:

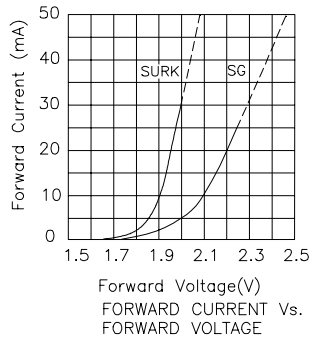
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



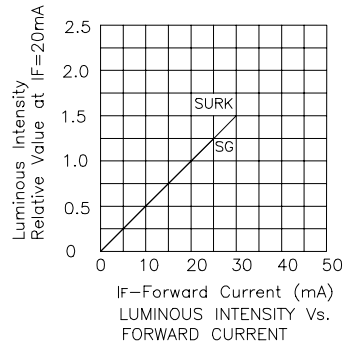
RELATIVE INTENSITY Vs. WAVELENGTH

## Hyper Red / Super Bright Green

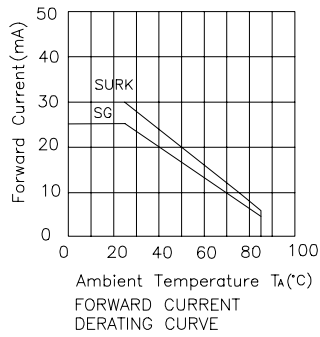
## L-59SURKSGC



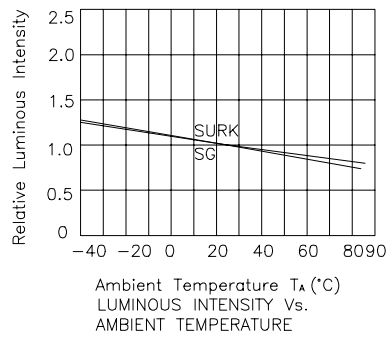
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

