

- TWO CHIPS IN SERIES CONNECTION.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green and Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

The Hyper Red and Mega Green source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

**Top View Dimensions:**

- Overall Diameter:  $\phi 5.5(.217)$
- Inner Diameter:  $\phi 4.9(.193)$
- Pin Diameter:  $\phi 3(.118)$

**Side View Dimensions:**

- Overall Length:  $7.1(.28)$
- Pin Length:  $24.5(.965)$  MIN
- Pin Spacing:  $2.5(.098)$  and  $3.5(.138)$
- Pin Thickness:  $0.7$  MAX
- Pin Width:  $2(.079)$  TYP
- Pin 1 to Pin 3 Distance:  $2.54(0.1)$
- Pin 1 to Pin 2 Distance:  $2.54(0.1)$
- Pin 2 to Pin 3 Distance:  $2.54(0.1)$

**Pin Detail View Dimensions:**

- Pin 1:  $1.0$  MAX
- Pin 2:  $8.97(.353)$   $\pm 0.5$
- Pin 3:  $0.5(0.02)$   $\pm 0.05$
- Pin 4:  $4(.157)$  TYP

**Pin Labels:**

- G
- SR
- SURK
- SG
- MKG
- Y

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

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L469EGW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	5	15	100°
	GREEN (GaP)		5	10	
L469GYW	GREEN (GaP)	WHITE DIFFUSED	5	10	100°
	YELLOW (GaAsP/GaP)		3	8	
L469SRSGW/CC	SUPER BRIGHT RED (GaAlAs)	WHITE DIFFUSED	40	60	100°
	SUPER BRIGHT GREEN (GaP)		8	15	
L469SURKMGKW	HYPER RED (InGaAlP)	WHITE DIFFUSED	70	170	100°
	MEGA GREEN (InGaAlP)		10	30	

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

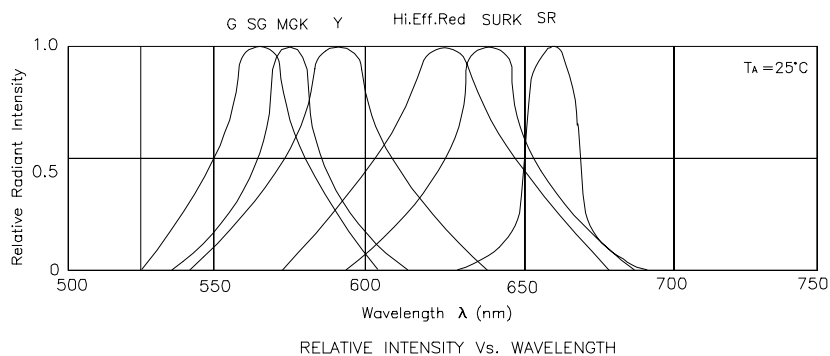
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Green Yellow Super Bright Red Super Bright Green Hyper Red Mega Green	627 565 590 660 565 640 574		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Green Yellow Super Bright Red Super Bright Green Hyper Red Mega Green	625 568 588 640 568 630 570		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	High Efficiency Red Green Yellow Super Bright Red Super Bright Green Hyper Red Mega Green	45 30 35 20 30 28 20		nm	IF=20mA
C	Capacitance	High Efficiency Red Green Yellow Super Bright Red Super Bright Green Hyper Red Mega Green	15 15 20 45 15 35 15		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Green Yellow Super Bright Red Super Bright Green Hyper Red Mega Green	2.0 2.2 2.1 1.85 2.2 1.95 2.1	2.5 2.5 2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

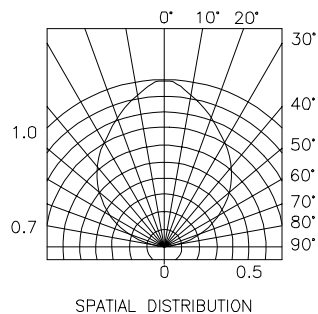
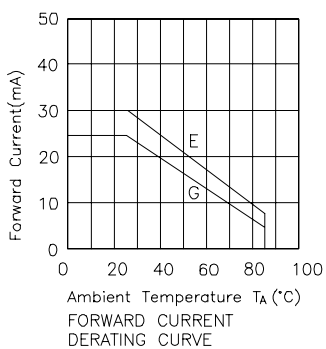
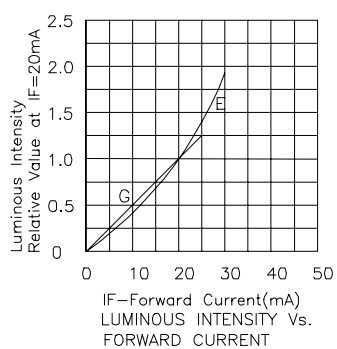
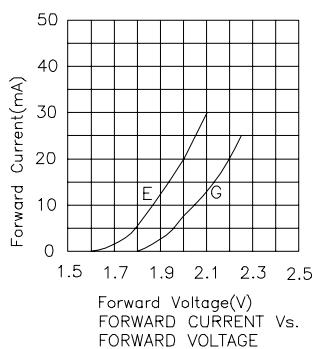
Parameter	High Efficiency Red	Green	Yellow	Super Bright Red	Super Bright Green	Hyper Red	Mega Green	Units
Power dissipation	105	105	105	100	105	170	105	mW
DC Forward Current	30	25	30	30	25	30	30	mA
Peak Forward Current [1]	160	140	140	155	140	185	205	mA
Reverse Voltage	5	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C							
Lead Solder Temperature [2]	260°C For 5 Seconds							

Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.

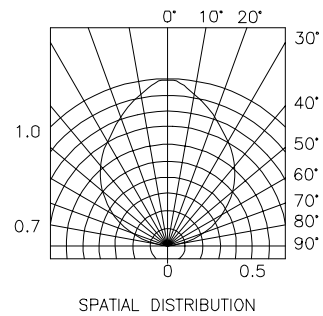
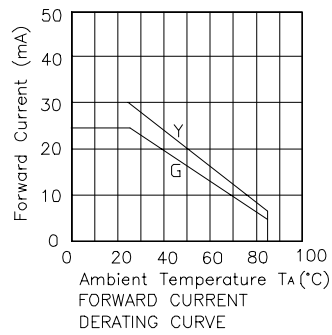
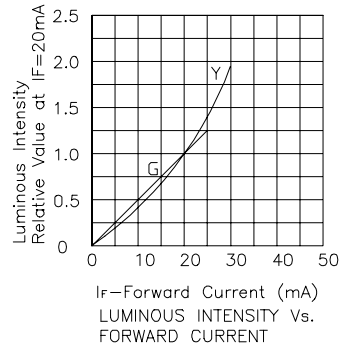
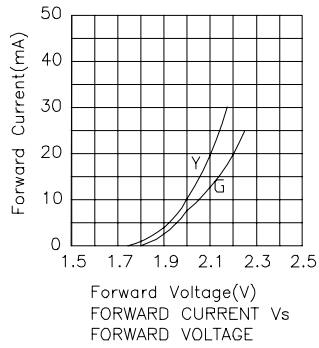


## High Efficiency Red / Green L469EGW

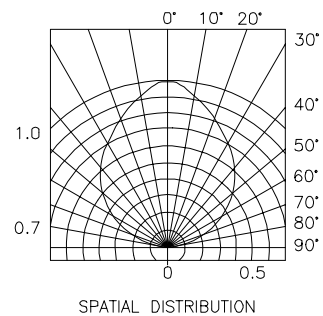
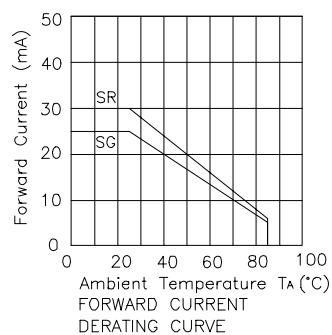
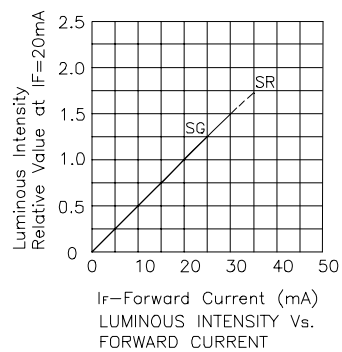
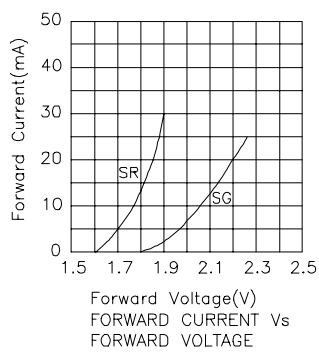


# Kingbright

## Green / Yellow L469GYW



## Super Bright Red / Super Bright Green L469SRSGW/CC



## Hyper Red / Mega Green L469SURKMGKW

