

L-119EGW HIGH EFFICIENCY RED / GREEN  
 L-119SRSGWT-CC SUPERBRIGHT RED / SUPER BRIGHT GREEN  
 L-119SURKMGKWT HYPER RED / MEGA GREEN

### Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- MILKY WHITE DIFFUSION LENS.
- 3 LEADS WITH ONE COMMON LEAD.
- THIRD COLOR (MIXED COLOR) AVAILABLE.
- SUPER BRIGHT VERSION AVAILABLE.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.

### Description

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

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

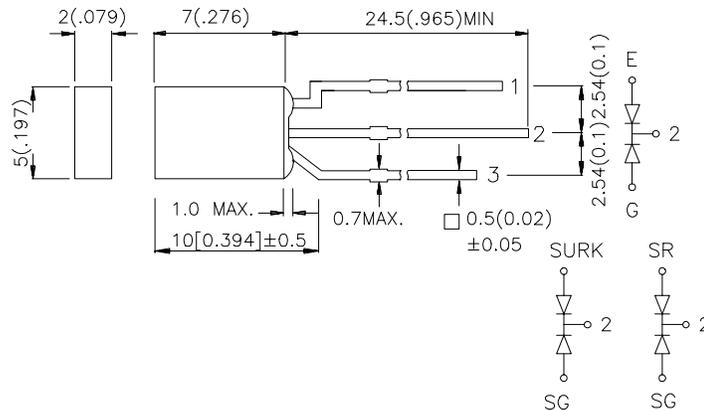
The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

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

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

The Mega Green source color devices are made with DH InGaAlP on GaAs substrate 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 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.	
L-119EGW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	8	20	110°
	GREEN (GaP)		5	12	
L-119SRSGWT-CC	SUPER BRIGHT RED (GaAlAs)	WHITE DIFFUSED	20	60	110°
	SUPER BRIGHT GREEN (GaP)		5	12	
L-119SURKMGKWT	HYPER RED (InGaAlP)	WHITE DIFFUSED	70	170	110°
	MEGA GREEN (InGaAlP)		10	30	

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 $T_A=25^\circ\text{C}$

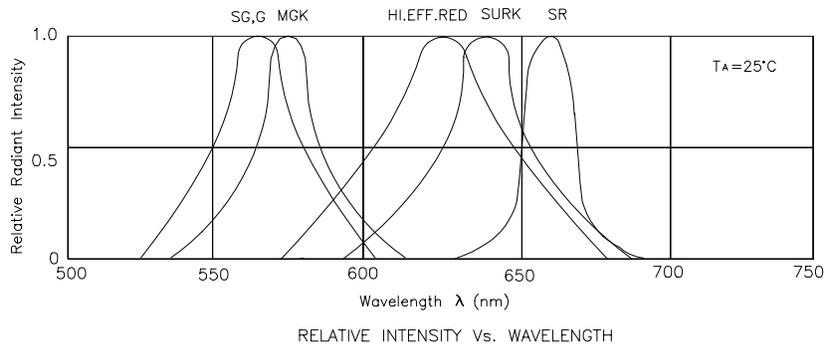
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{\text{peak}}$	Peak Wavelength	High Efficiency Red Green Super Bright Green Super Bright Red Hyper Red Mega Green	627 565 565 660 640 574		nm	$I_F=20\text{mA}$
$\lambda_D$	Dominate Wavelength	High Efficiency Red Green Super Bright Green Super Bright Red Hyper Red Mega Green	625 568 568 640 630 570		nm	$I_F=20\text{mA}$
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green Super Bright Green Super Bright Red Hyper Red Mega Green	45 30 30 20 28 20		nm	$I_F=20\text{mA}$
C	Capacitance	High Efficiency Red Green Super Bright Green Super Bright Red Hyper Red Mega Green	15 15 15 45 35 15		pF	$V_F=0\text{V}; f=1\text{MHz}$
$V_F$	Forward Voltage	High Efficiency Red Green Super Bright Green Super Bright Red Hyper Red Mega Green	2.0 2.2 2.2 1.85 1.95 2.1	2.5 2.5 2.5 2.5 2.5 2.5	V	$I_F=20\text{mA}$
$I_R$	Reverse Current	All		10	$\mu\text{A}$	$V_R = 5\text{V}$

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

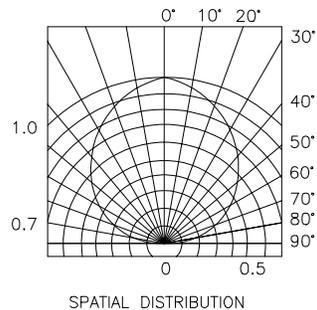
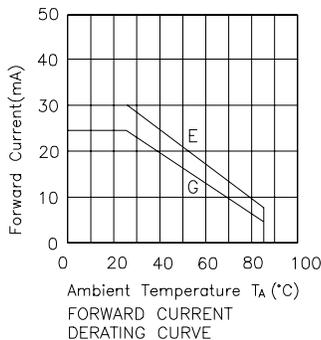
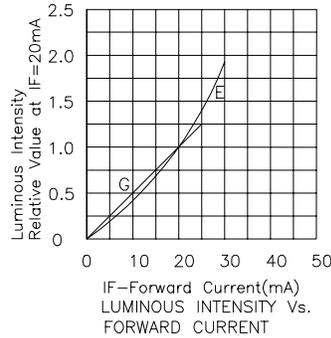
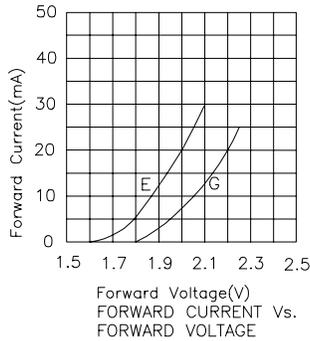
Parameter	Mega Green	High Efficiency Red	Green	Super Bright Green	Super Bright Red	Hyper Red	Units
Power dissipation	105	105	105	105	100	170	mW
DC Forward Current	30	30	25	25	30	30	mA
Peak Forward Current [1]	205	160	140	140	155	185	mA
Reverse Voltage	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C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

Notes:

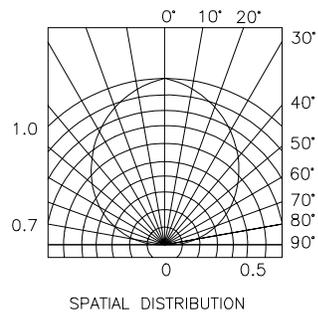
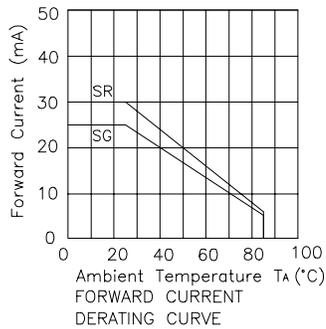
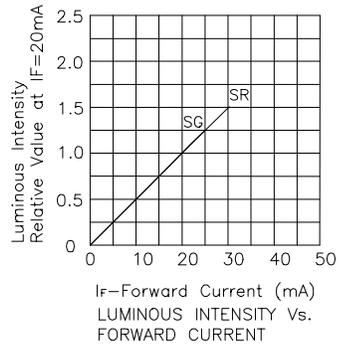
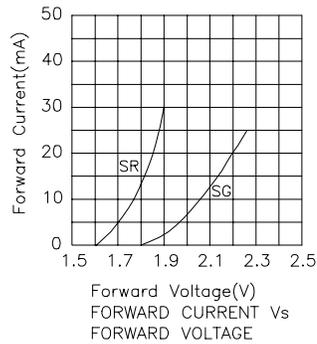
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



## High Efficiency Red / Green L-119EGW



## Super Bright Red / Super Bright Green L-119SRSGWT-CC



## Hyper Red / Mega Green L-119SURKMGKWT

