



L-59SURKMGKC HYPER RED / MEGA GREEN

### **Features**

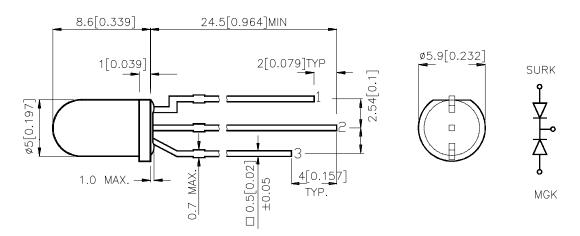
- •UNIFORMLIGHTOUTPUT.
- •LOWPOWERCONSUMPTION.
- •3LEADSWITHONE COMMONLEAD.
- •THIRD COLOR (MIXED COLOR) AVAILABLE.
- •I.C.COMPATIBLE.
- •LONGLIFE-SOLID STATE RELIABILITY.

## **Description**

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

The Mega Green source color devices are made with DH InGaAIP on GaAs substrate Light Emitting Diode.

## **Package Dimensions**



- 1 ANDDE RED
- 2 COMMON CATHODE
- 3 ANDDE GREEN

### Notes:

- 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.

SPEC NO: DSAA9409 APPROVED : J. Lu REV NO: V.1 CHECKED:

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## **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 20 mA		<b>Viewing</b> Angle
		,	Min.	Тур.	201/2
L-59SURKMGKC	HYPER RED (InGaAIP)	WATER CLEAR	500	1300	- 24°
	MEGA GREEN (InGaAIP)	WATER CLEAR	200	400	

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions	
λpeak	Peak Wavelength	Hyper Red Mega Green	640 574		nm	IF=20mA	
λD	Dominate Wavelength	Hyper Red Mega Green	630 570		nm	IF=20mA	
Δλ1/2	Spectral Line Halfwidth	Hyper Red Mega Green	28 20		nm	IF=20mA	
С	Capacitance	Hyper Red Mega Green	35 15		pF	VF=0V;f=1MHz	
V <sub>F</sub>	Forward Voltage	Hyper Red Mega Green	1.95 2.1	2.5 2.5	V	IF=20mA	
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V	

# Absolute Maximum Ratings at T<sub>A</sub>=25°C

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

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

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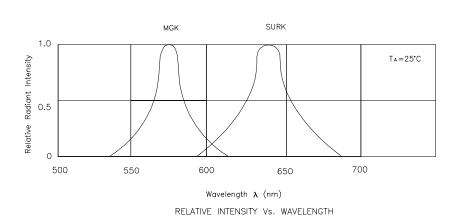
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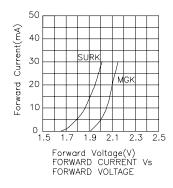
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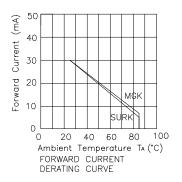
Note: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

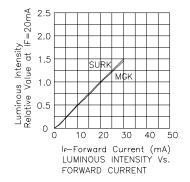


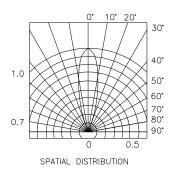


## Hyper Red/Mega Green L-59SURKMGKC









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