

L7113SEx SUPER BRIGHT ORANGE

L7113SYx SUPER BRIGHT YELLOW

### Features

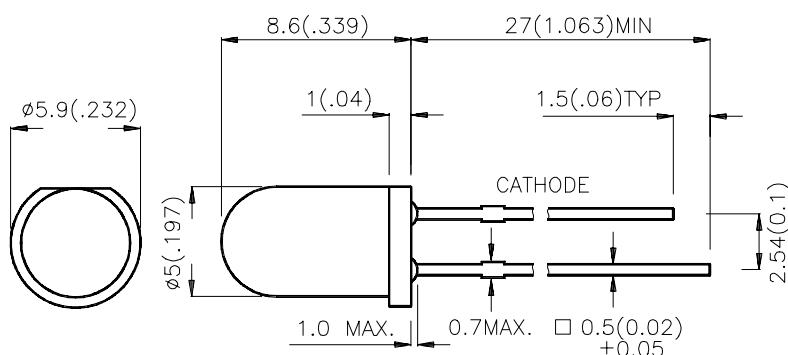
- ULTRA BRIGHTNESS.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

### Description

The Super Bright Orange source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

The Super Bright Yellow 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  $\pm 0.25(0.01")$  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	I <sub>v</sub> (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	
L7113SEC	SUPER BRIGHT ORANGE (InGaAlP)	WATER CLEAR	700	2500	20°
L7113SET		ORANGE TRANS.	700	2500	20°
L7113SED		ORANGE DIFFUSED	400	800	30°
L7113SYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	400	1200	20°
L7113SYT		YELLOW TRANS.	400	1200	20°
L7113SYD		YELLOW DIFFUSED	100	400	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

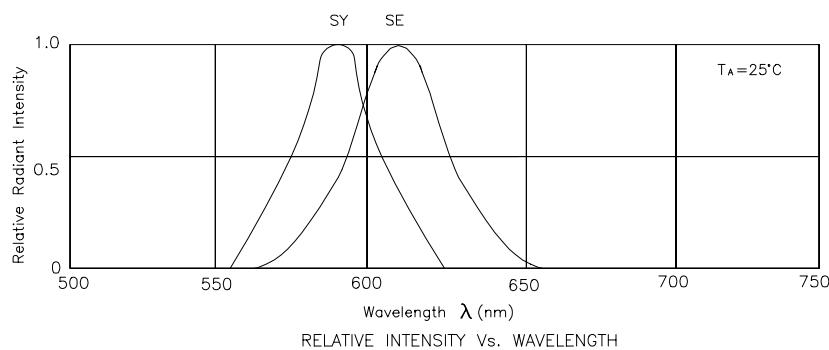
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Orange Super Bright Yellow	610 590		nm	IF=20mA
λ D	Dominant Wavelength	Super Bright Orange Super Bright Yellow	601 588		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Super Bright Orange Super Bright Yellow	29 28		nm	IF=20mA
C	Capacitance	Super Bright Orange Super Bright Yellow	30 25		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Orange Super Bright Yellow	2.0 2.0	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

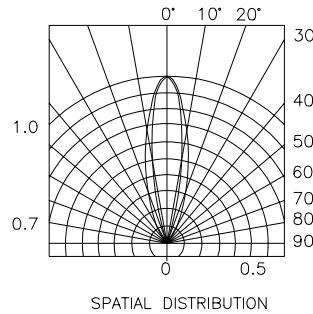
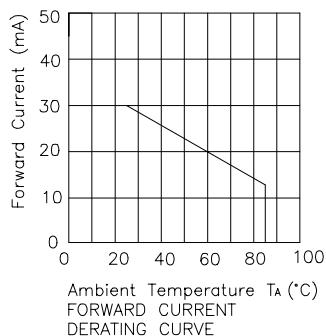
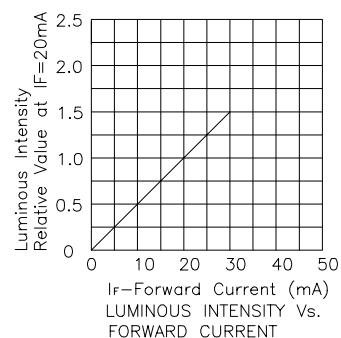
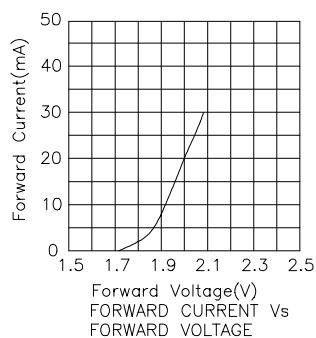
Parameter	Super Bright Orange	Super Bright Yellow	Units
Power dissipation	75	125	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	195	175	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		
Lead Soldering Temperature [2]	260°C For 5 Seconds		

Notes:

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



## Super Bright Orange L7113SEC,L7113SET,L7113SED



## Super Bright Yellow L7113SYC,L7113SYT,L7113SYD

