

Surface Mount LEDs

Order code	Manufacturer code	Description
72-8904	n/a	SUPER FLUX PCB LED - RED 630NM (RC)
72-8906	n/a	SUPER FLUX PCB LED - RED 640NM (RC)
72-8908	n/a	SUPER FLUX PCB LED - YELLOW 595NM (RC)

Surface Mount LEDs	Page 1 of 6
The enclosed information is believed to be correct, Information may change without notice due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 20/02/2007

Kingbright®

7.6mm x7.6mm SUPER FLUX

L-7676CSEC

L-7676SURC

L-7676CSEC-E

L-7676SURC-E

L-7676CSYC

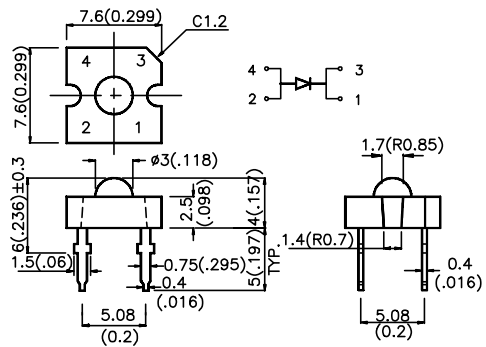
Features

- | SUPER FLUX OUTPUT.
- | DESIGN FOR HIGH CURRENT OPERATION.
- | OUTSTANDING MATERIAL EFFICIENCY.
- | RELIABLE AND RUGGED.

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 subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA *70mA		Viewing Angle 2θ/2
			Min.	Max.	
L-7676CSEC	SUPER BRIGHT ORANGE (InGaAlP)	WATER CLEAR	200	700	70°
			*1300	*2500	70°
L-7676CSEC-E	HYPER ORANGE (InGaAlP)	WATER CLEAR	400	1000	70°
			*1300	*2500	70°
L-7676CSYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	200	600	70°
			*300	1000	70°
L-7676CSURC	HYPER RED (InGaAlP)	WATER CLEAR	300	700	70°
			*700	*1600	70°
L-7676CSURC-E	HYPER RED (InGaAlP)	WATER CLEAR	300	800	70°
			*700	*1600	70°

NOTES FOR L-7676C SERIES:

- *1. DRIVE CURRENT BETWEEN 10mA AND 30mA ARE RECOMMENDED FOR LONG TERM PERFORMANCE.
- *2. OPERATION AT CURRENT BELOW 10mA IS NOT RECOMMENDED.

Note:

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

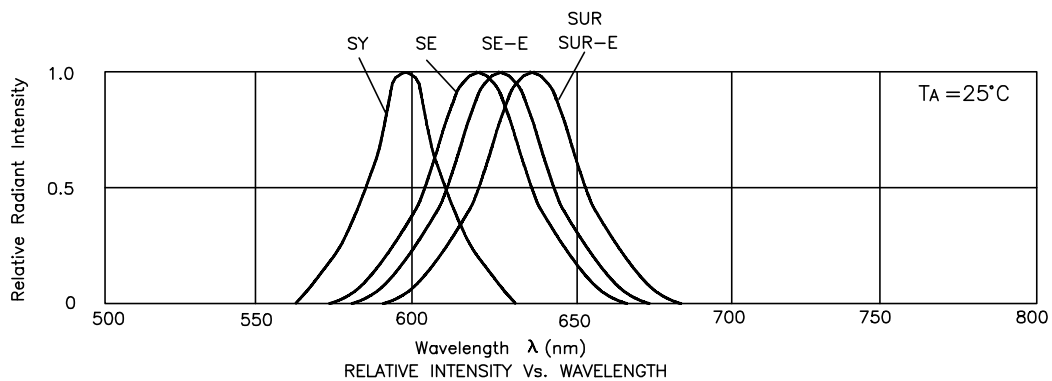
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	SE SE-E SY SUR SUR-E	620 630 595 640 640		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	SE SE-E SY SUR SUR-E	15 20 20 25 25		nm	IF=20mA
C	Capacitance	SE SE-E SY SUR SUR-E	40 25 33 35 30		pF	VF=0V;f=1MHz
V _F	Forward Voltage	SE SE-E SY SUR SUR-E	1.95 2.45 2.0 2.0 2.45	2.5 2.6 2.4 2.2 2.6	V	IF=20mA
I _R	Reverse Current	All	10		uA	VR = 5V

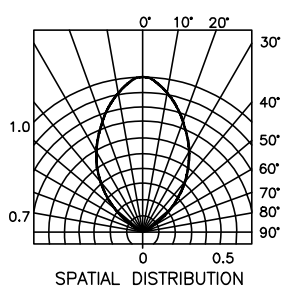
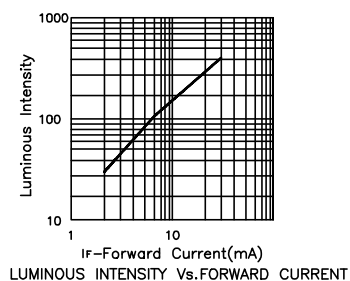
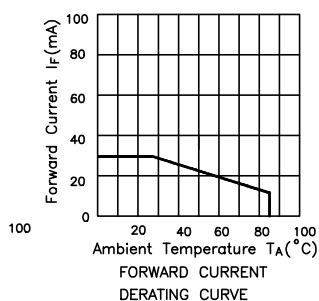
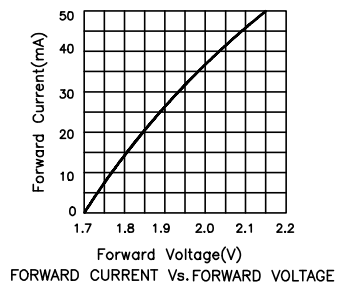
Absolute Maximum Ratings T_A=25°C

Parameter	SE	SY	SE-E	SUR	SURC-E	Units
Power dissipation	75	125	150	170	150	mW
DC Forward Current	30	30	40	50	40	mA
Peak Forward Current [1]	150	150	120	150	120	mA
Reverse Voltage	5	5	5	5	5	V
Operation/Storage Temperature	-40 °C To +85 °C					
Lead Solder Temperature [2]	260 °C For 5 Seconds					

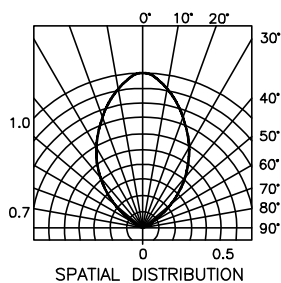
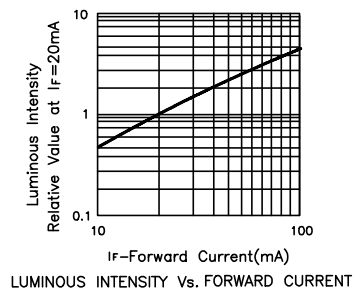
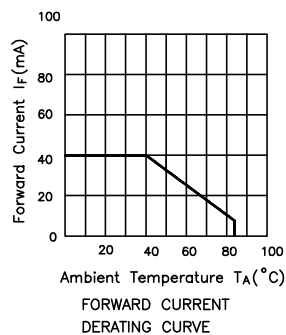
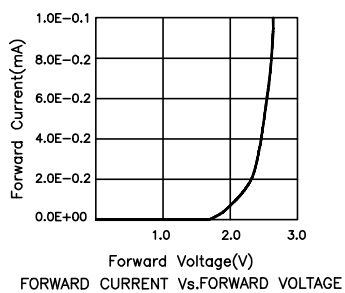
Notes:
 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
 2. 4mm below package base.



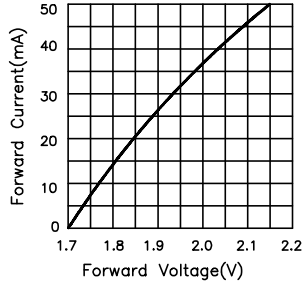
Super Bright Orange L-7676CSEC



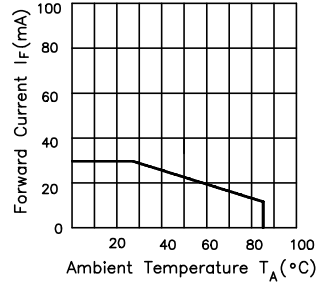
Hyper Orange L-7676CSEC-E



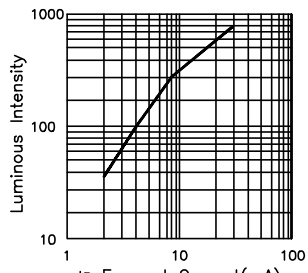
Super Bright Yellow L-7676CSYC



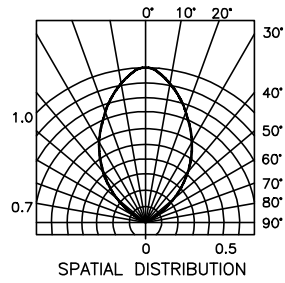
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

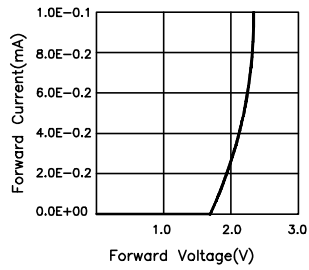


LUMINOUS INTENSITY Vs. FORWARD CURRENT

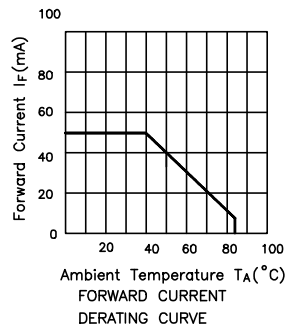


SPATIAL DISTRIBUTION

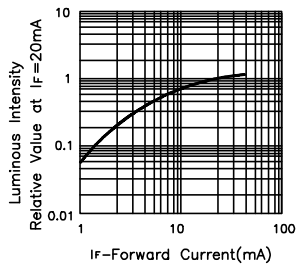
Hyper Red L-7676CSURC



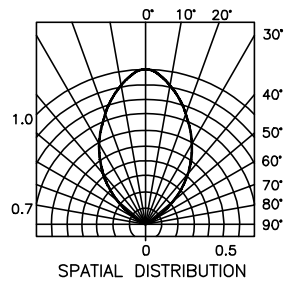
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

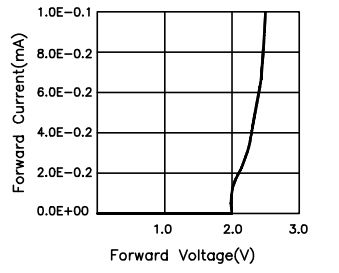


LUMINOUS INTENSITY Vs. FORWARD CURRENT

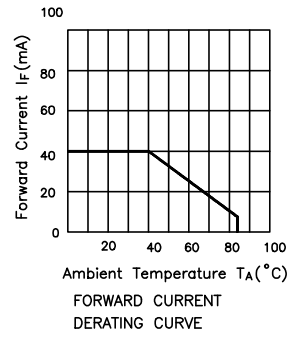


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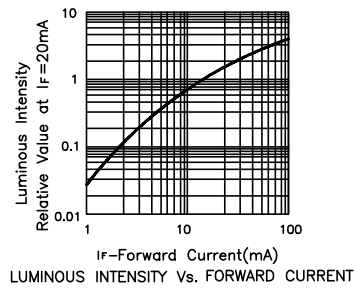
Hyper Red L-7676CSURC-E



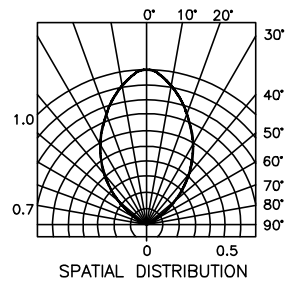
FORWARD CURRENT vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY vs. FORWARD CURRENT



SPATIAL DISTRIBUTION