Kingbright

7.6mmX7.6mm SUPER FLUX

L7676CSEC-x	HYPER ORANGE
L7676CSYC	SUPER BRIGHT YELLOW
L7676CSURC	HYPER RED
L7676CSURC-E	HYPER RED

Features

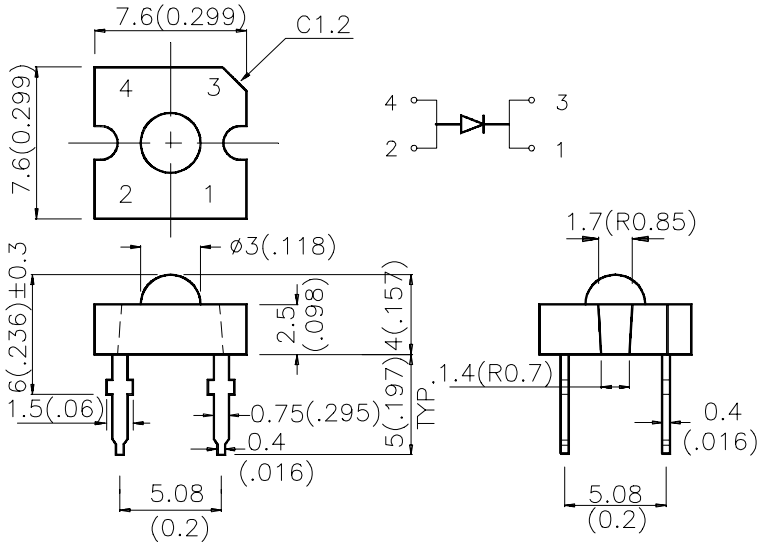
- SUPER FLUX OUTPUT.
- DESIGN FOR HIGH CURRENT OPERATION.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.

Description

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

The Hyper Red 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.

Kingbright

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA *70mA		Viewing Angle
			Min.	Typ.	2 1/2
L7676CSEC-E	HYPER ORANGE (InGaAlP)	WATER CLEAR	500	800	70°
			*1500	*2800	70°
L7676CSEC-G	HYPER ORANGE (InGaAlP)	WATER CLEAR	700	1200	70°
			*1200	*3500	70°
L7676CSEC-H	HYPER ORANGE (InGaAlP)	WATER CLEAR	1500	1800	70°
			*5000	*7000	70°
L7676CSYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	200	400	70°
			*300	*700	70°
L7676CSURC	HYPER RED (InGaAlP)	WATER CLEAR	300	500	70°
			*700	*1000	70°
L7676CSURC-E	HYPER RED (InGaAlP)	WATER CLEAR	300	600	70°
			*700	*1000	70°

NOTES FOR L7676C SERIES:
*1. DRIVE CURRENT BETWEEN 10mA AND 30mA ARE RECOMMENDED FOR LONG TERM PERFORMANCE.
*2. OPERATION AT CURRENT BELOW 10mA IS NOT RECOMMENDED.

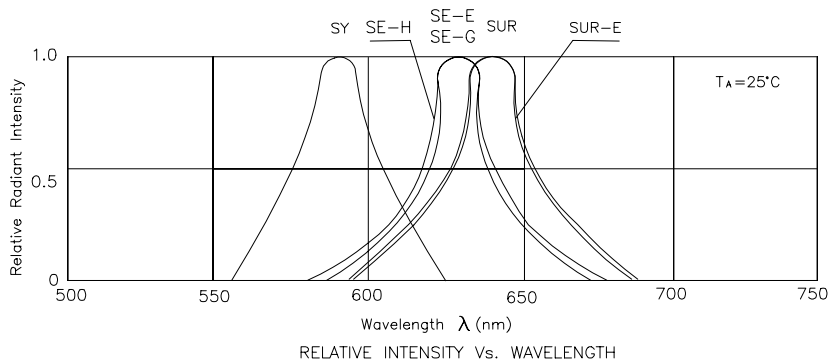
Absolute Maximum Ratings at T_A=25°C

Parameter	Hyper Orange (SE-E)	Hyper Orange (SE-G)	Hyper Orange (SE-H)	Super Bright Yellow	Hyper Red (SUR)	Hyper Red (SUR-E)	Units
Power dissipation	150	125	120	125	170	150	mW
DC Forward Current	40	30	30	30	30	40	mA
Peak Forward Current [1]	195	200	150	175	185	200	mA
Reverse Voltage	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. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

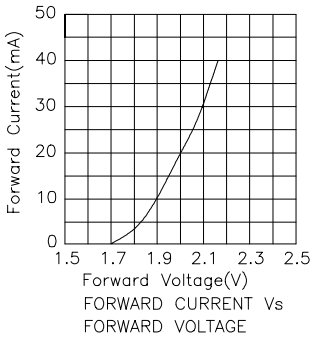
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Orange (SE-E) Hyper Orange (SE-G) Hyper Orange (SE-H) Super Bright Yellow Hyper Red (SUR) Hyper Red (SUR-E)	630 630 630 590 640 640		nm	IF=20mA
λ D	Dominate Wavelength	Hyper Orange (SE-E) Hyper Orange (SE-G) Hyper Orange (SE-H) Super Bright Yellow Hyper Red (SUR) Hyper Red (SUR-E)	621 625 630 588 628 630		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Hyper Orange (SE-E) Hyper Orange (SE-G) Hyper Orange (SE-H) Super Bright Yellow Hyper Red (SUR) Hyper Red (SUR-E)	20 20 25 28 27 25		nm	IF=20mA
C	Capacitance	Hyper Orange (SE-E) Hyper Orange (SE-G) Hyper Orange (SE-H) Super Bright Yellow Hyper Red (SUR) Hyper Red (SUR-E)	25 20 27 25 45 45		pF	VR=0V;f=1MHz
V_F	Forward Voltage	Hyper Orange (SE-E) Hyper Orange (SE-G) Hyper Orange (SE-H) Super Bright Yellow Hyper Red (SUR) Hyper Red (SUR-E)	2.0 1.9 2.4 2.0 1.9 1.9	2.5 2.5 2.8 2.5 2.5 2.5	V	IF=20mA
I_R	Reverse Current	All		10	uA	VR = 5V

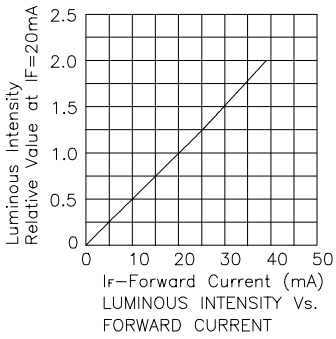


RELATIVE INTENSITY Vs. WAVELENGTH

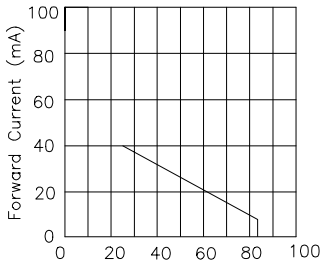
HYPER ORANGE L7676CSEC-E



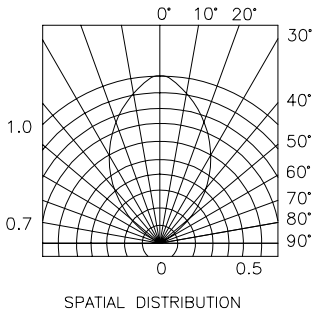
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

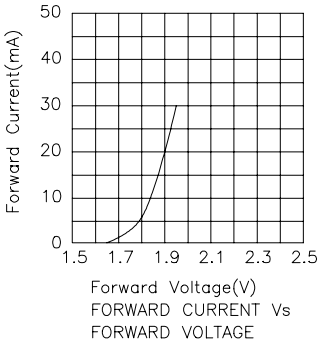


FORWARD CURRENT
DERATING CURVE

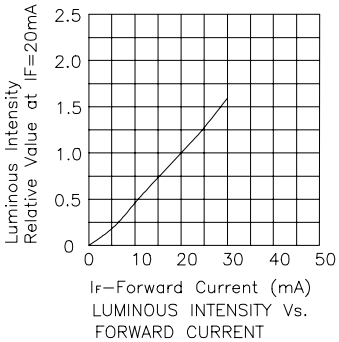


SPATIAL DISTRIBUTION

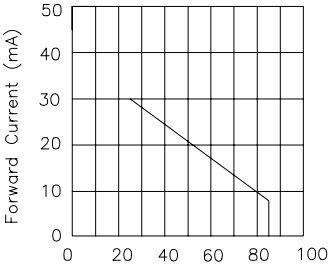
HYPER ORANGE L7676CSEC-G



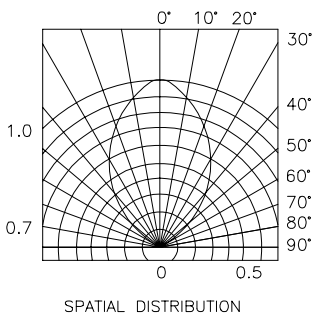
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



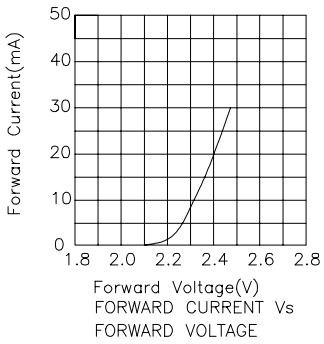
FORWARD CURRENT
DERATING CURVE



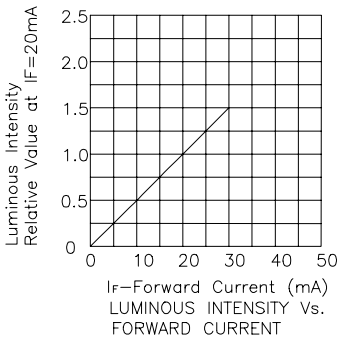
SPATIAL DISTRIBUTION

Kingbright

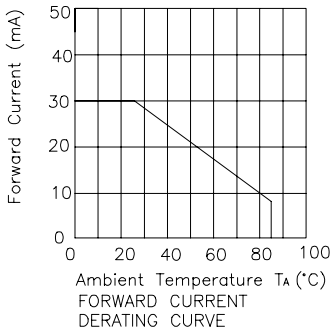
HYPER ORANGE L7676CSEC-H



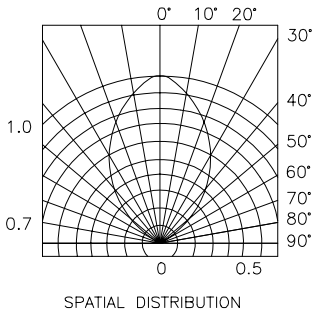
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

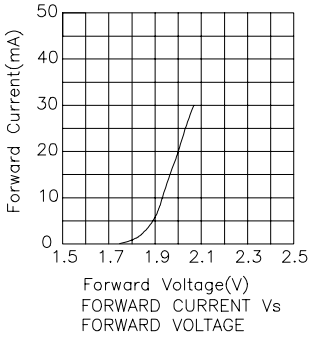


FORWARD CURRENT
DERATING CURVE

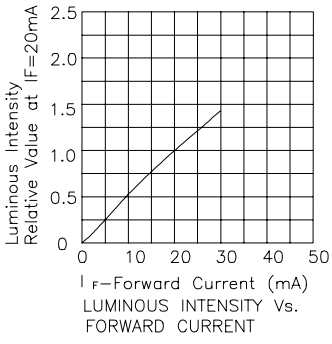


SPATIAL DISTRIBUTION

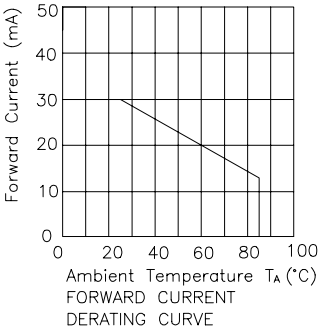
SUPER BRIGHT YELLOW L7676CSYC



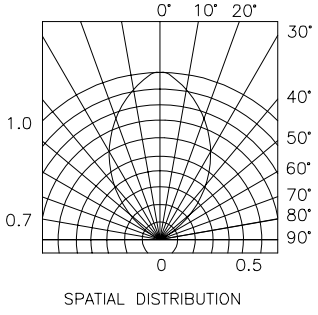
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



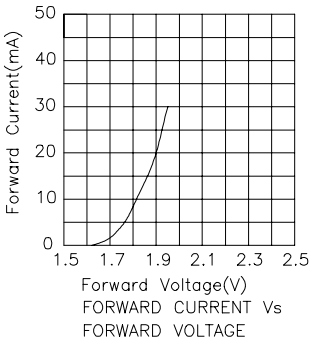
FORWARD CURRENT
DERATING CURVE



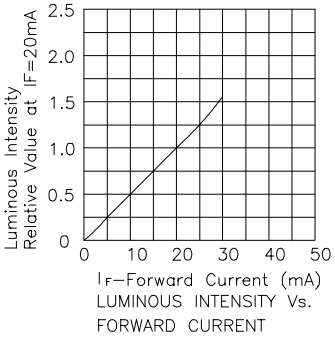
SPATIAL DISTRIBUTION

Kingbright

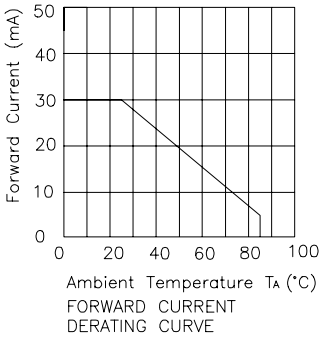
HYPER RED L7676CSURC



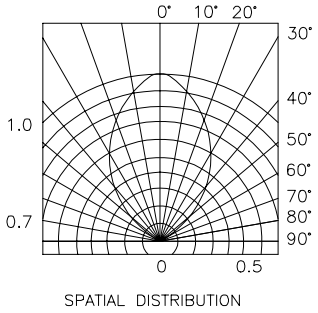
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

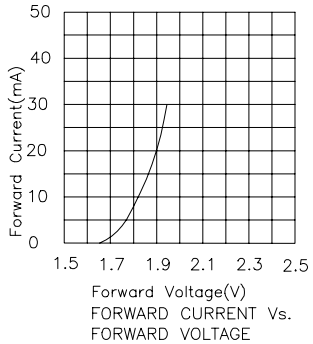


FORWARD CURRENT
DERATING CURVE

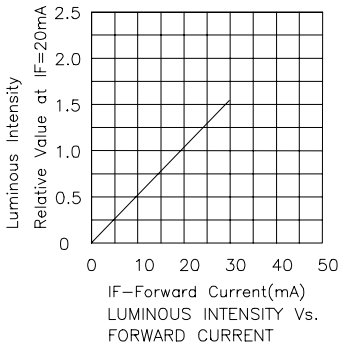


SPATIAL DISTRIBUTION

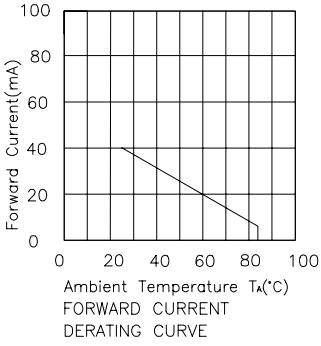
HYPER RED L7676CSURC-E



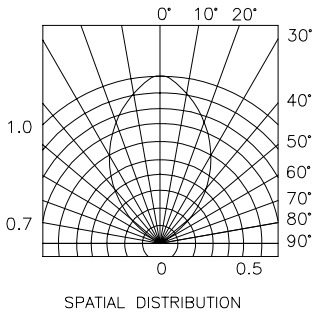
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



SPATIAL DISTRIBUTION

This datasheet has been downloaded from:

www.DatasheetCatalog.com

Datasheets for electronic components.