Kingbright

5mm ROUND LED LAMP

PRELIMINARY SPEC

Part Number: WP9294SEC/J3 Hyper Orange

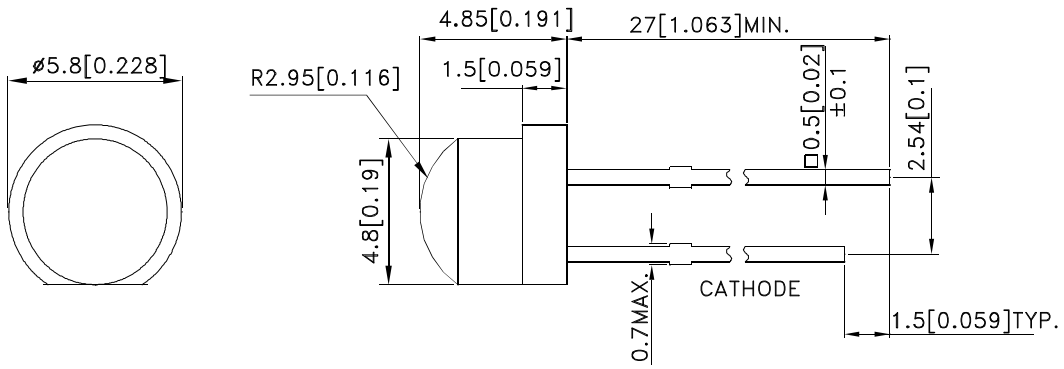
Features

- High luminous white emission
- Low power consumption.
- General purpose leads.
- Reliable and rugged.
- Long life - solid state reliability.
- RoHS compliant.

Description

The Hyper Orange device is based on light emitting diode chip made from AlInGaP.

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 leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
WP9294SEC/J3	Hyper Orange (AlInGaP)	WATER CLEAR	650	1600	130°

Notes:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

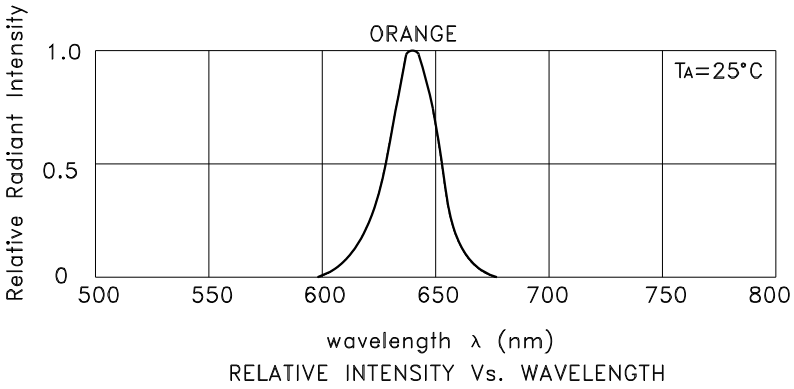
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Orange	640		nm	I_F=20mA
λD [1]	Dominant Wavelength	Hyper Orange	630		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Hyper Orange	25		nm	I_F=20mA
C	Capacitance	Hyper Orange	27		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage	Hyper Orange	2.2	2.8	V	I_F=20mA
I_R	Reverse Current	Hyper Orange		10	uA	V_R = 5V

Notes:
1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

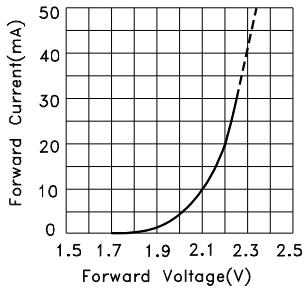
Parameter	Hyper Orange	Units
Power dissipation	84	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

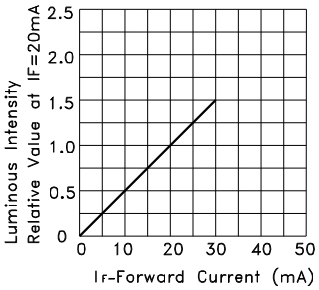


RELATIVE INTENSITY Vs. WAVELENGTH

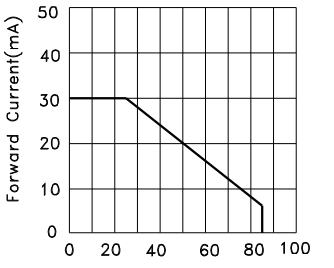
Hyper Orange **WP9294SEC/J3**



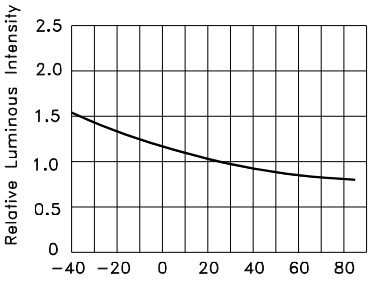
FORWARD CURRENT Vs.
FORWARD VOLTAGE



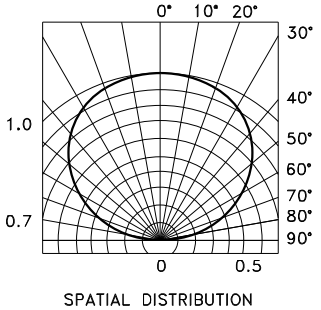
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

PACKING & LABEL SPECIFICATIONS **WP9294SEC/J3**