Kingbright

OVAL BI-COLOR LED LAMP

L1619URURC/CA

HYPER RED / HYPER RED

Features

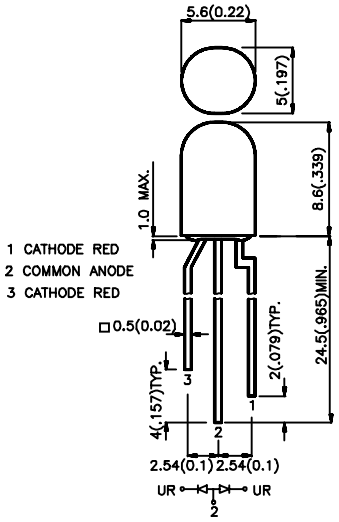
- ULTRA BRIGHT VERSION.
- OVAL SHAPE. WIDER VIEWING ANGLE IN HORIZONTAL DIRECTION.
- 3 LEADS, COMMON ANODE.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The Hyper Red source color devices are made with

Gallium Aluminum Arsenide Red 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 subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L1619URURC/CA	HYPER RED (GaAlAs)	WATER CLEAR	480	1300	60° (H) 30° (V)
	HYPER RED (GaAlAs)		480	1300	

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

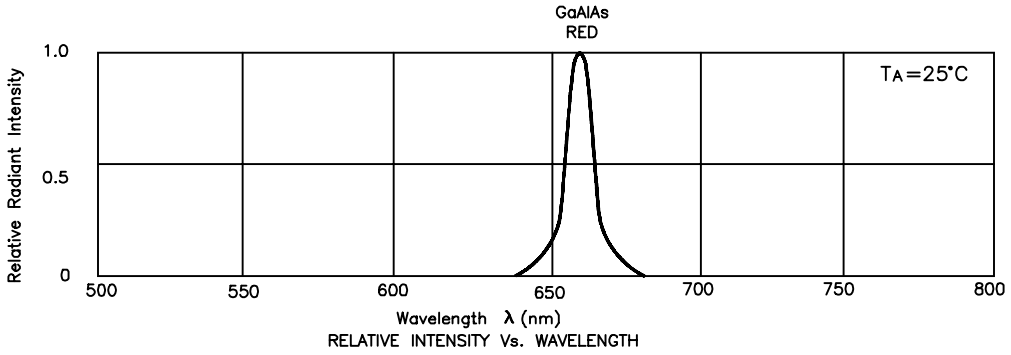
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	660		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Hyper Red	20		nm	IF=20mA
C	Capacitance	Hyper Red	95		pF	VF=0V;f=1MHz
V_F	Forward Voltage	Hyper Red	1.85	2.5	V	IF=20mA
I_R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

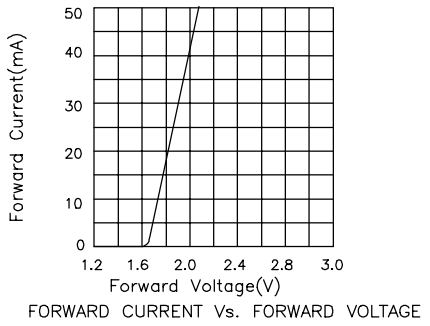
Parameter	Hyper Red	Units
Power dissipation	100	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Soldering Temperature [2]	260°C For 5 Seconds	

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

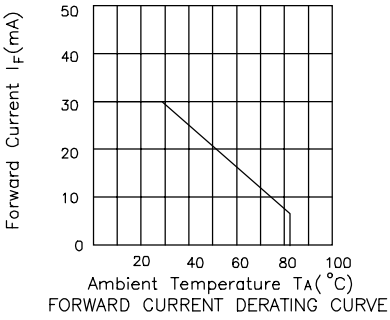


RELATIVE INTENSITY Vs. WAVELENGTH

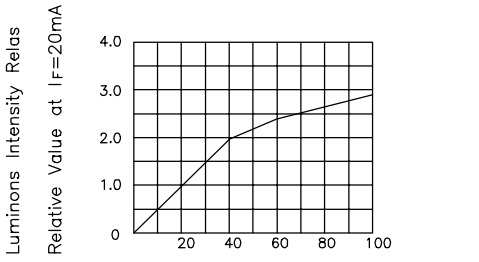
Hyper Red L1619URURC/CA



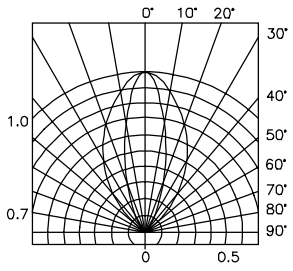
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION