

Datasheet: 10-2603.320AL Bi-colour Red/Green Three Pin LED



Description:

Bi-colour red/green T1 three pin LED with leads formed to fit EAO switch 92-851.342.
Red LED brightness 1000mcd @ $I_v=20\text{mA}$, peak wavelength 640nm V_F typ 1.9V
Green LED brightness 1800mcd @ $I_v=20\text{mA}$, peak wavelength 520nm V_F typ 3.5V
Viewing angle 50 degrees

Assembly:

The LED is fitted on to the top of the 92-851.342 switch with the three legs aligned with the locating holes in three of the corners of the switch body.

Specifications:

The following pages show the manufacturers datasheet of the standard led prior to the lead forming.

Useful Links:

Full Data on EAO Series 84 Switch Range

http://www.eao.com/global/en/Catalogues/PDF_Data_with_drawings/EAO_Recommended_Series/EAO-Series-84-Full-Data.pdf

PRELIMINARY SPEC

Part Number: L-3VSURVGC HYPER RED / GREEN



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- 3 LEADS WITH ONE COMMON LEAD.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

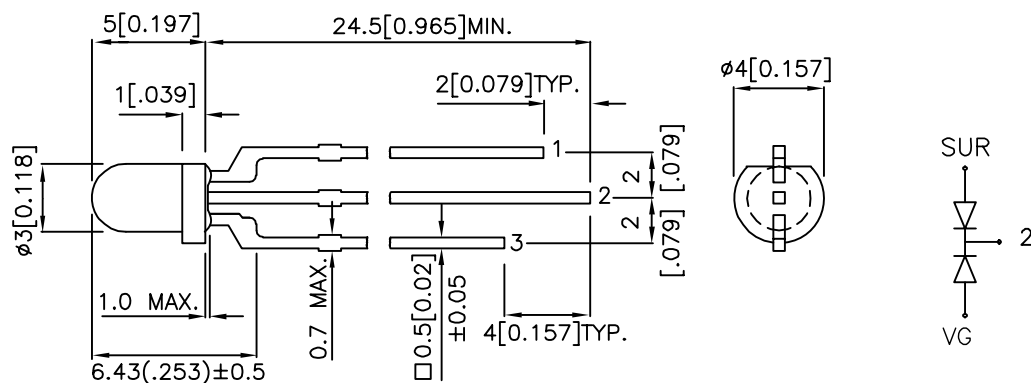
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

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] @ 20 mA		Viewing Angle[1]
			Min.	Typ.	2θ1/2
L-3VSURVGC	HYPER RED (InGaAlP)	WATER CLEAR	380	1000	50°
	GREEN (InGaN)		650	1800	

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 Red Green	640 520		nm	IF=20mA
λD[1]	Dominant Wavelength	Hyper Red Green	628 525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red Green	27 38		nm	IF=20mA
C	Capacitance	Hyper Red Green	45 45		pF	VF=0V;f=1MHz
VF[2]	Forward Voltage	Hyper Red Green	1.9 3.5	2.5 4.5	V	IF=20mA
IR	Reverse Current	Hyper Red Green		10 10	uA	VR = 5V

Notes:

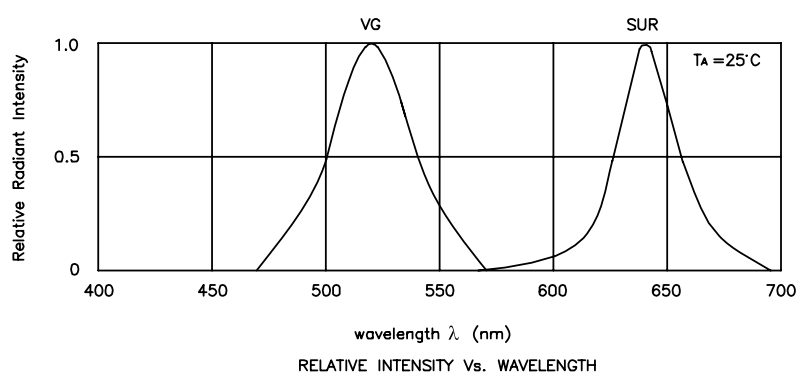
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

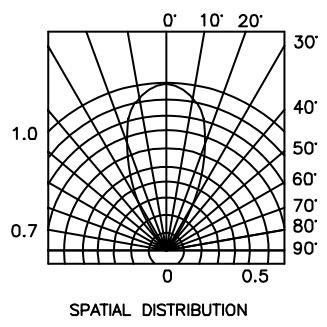
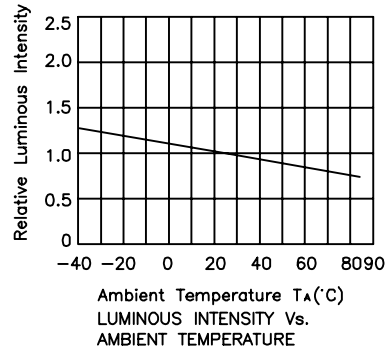
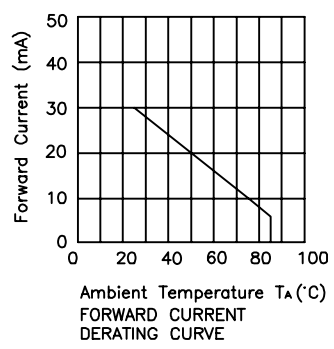
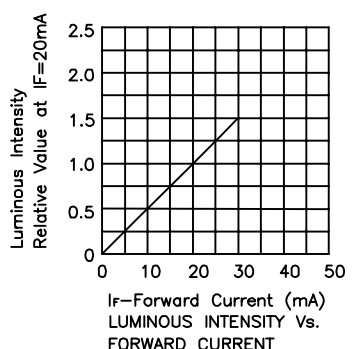
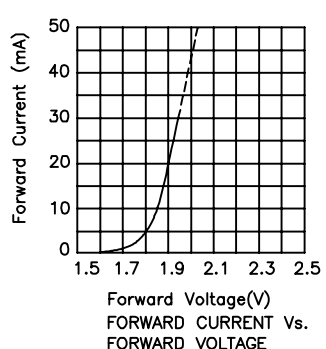
Parameter	Hyper Red	Green	Units
Power dissipation	75	135	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	185	150	mA
Reverse Voltage	5		V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

Notes:

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



**L-3VSURVGC
Hyper Red**



Green

