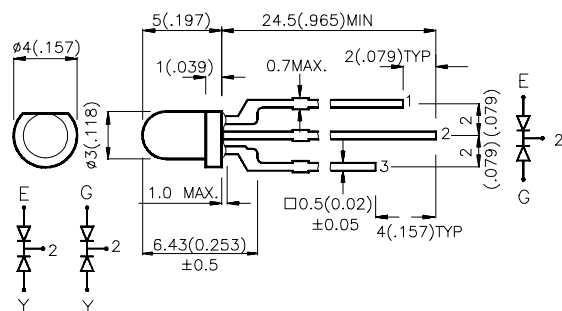


Package Dimensions



Notes:

- All dimensions are in millimeters (inches).
- Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
- Lead spacing is measured where the lead emerge package.
- Specifications are subject to change without notice.

T-1 (3mm) BI-COLOR INDICATOR LAMPS

E3VEGW	HIGH EFFICIENCY RED / GREEN
E3VEYW	HIGH EFFICIENCY RED / YELLOW
E3VGYW	GREEN / YELLOW

Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- MILKY WHITE DIFFUSION LENS.
- 4.3 LEADS WITH ONE COMMON LEAD.
- THIRD COLOR (MIXED COLOR) AVAILABLE.
- SUPER BRIGHT VERSION AVAILABLE.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Selection Guide

Part No.	Emitting Color +Material	D(nm)	Lens Type	Iv (mcd)@20mA		Viewing Angle
				Min.	Typ.	2 θ 1/2
E3VEGW	GaAsP/GaP	625	WHITE DIFFUSED	12	40	60°
	GaP	568		12	35	
E3VEYW	GaAsP/GaP	625	WHITE DIFFUSED	12	40	60°
	GaAsP/GaP	588		8	15	
E3VGYW	GaP	568	WHITE DIFFUSED	12	35	60°
	GaAsP/GaP	588		8	15	

Note:

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

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

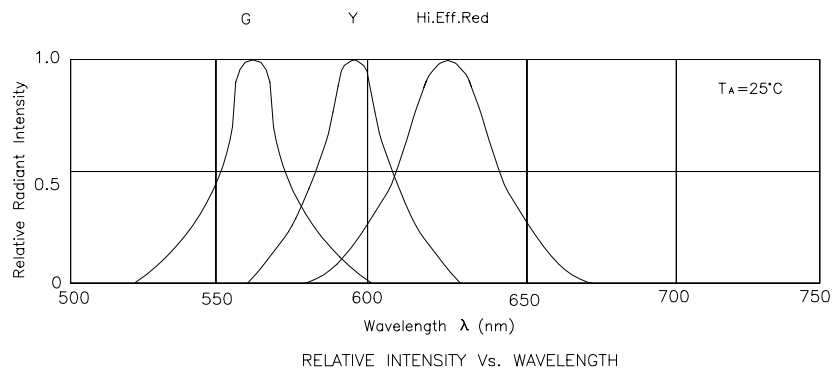
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green Yellow	627 565 590		nm	$I_F=20\text{mA}$
λ_D	Dominate Wavelength	High Efficiency Red Green Yellow	625 568 588		nm	$I_F=20\text{mA}$
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green Yellow	45 30 35		nm	$I_F=20\text{mA}$
C	Capacitance	High Efficiency Red Green Yellow	15 15 20		pF	$V_F=0\text{V}; f=1\text{MHz}$
V_F	Forward Voltage	High Efficiency Red Green Yellow	2.0 2.0 2.1	2.5 2.5 2.5	V	$I_F=20\text{mA}$
I_R	Reverse Current	All		10	μA	$V_R = 5\text{V}$

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

Parameter	High Efficiency Red	Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			
Lead Soldering Temperature [2]	260°C For 5 Seconds			

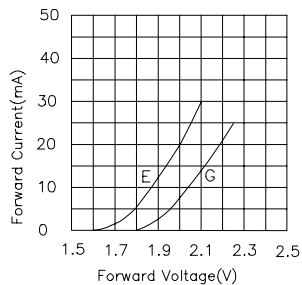
Notes:

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

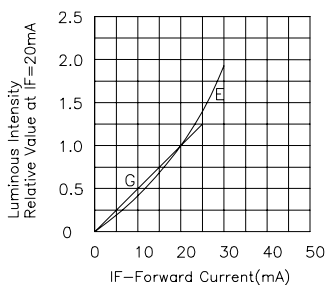


High Efficiency Red/Green E3VEGW

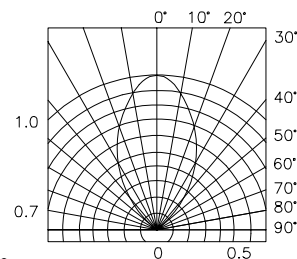
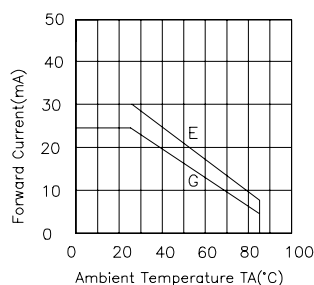
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

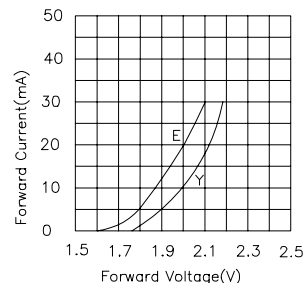


FORWARD CURRENT DERATING CURVE

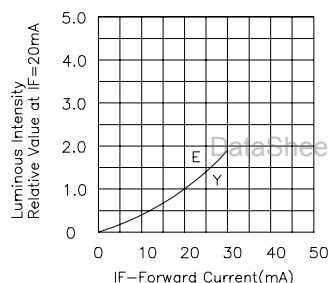


High Efficiency Red/Yellow E3VEYW

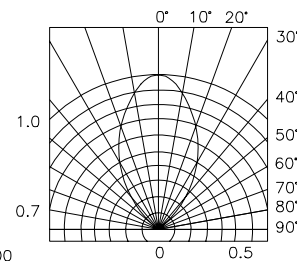
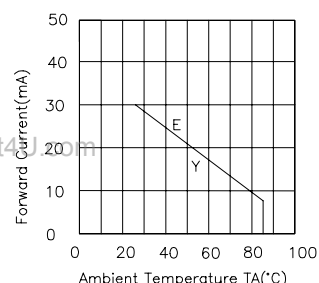
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

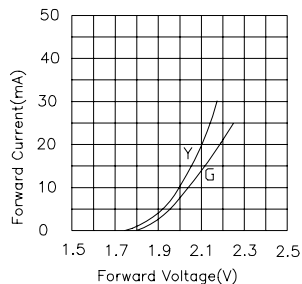


FORWARD CURRENT DERATING CURVE

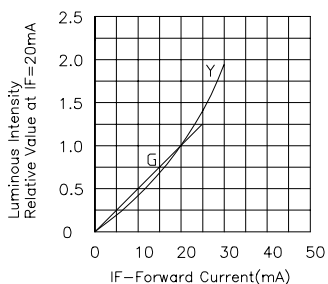


Green/Yellow E3VGYW

FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

