

Features

- WIDE VIEWING ANGLE.
- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- TRANSPARENT AND WATER CLEAR TYPE AVAILABLE.

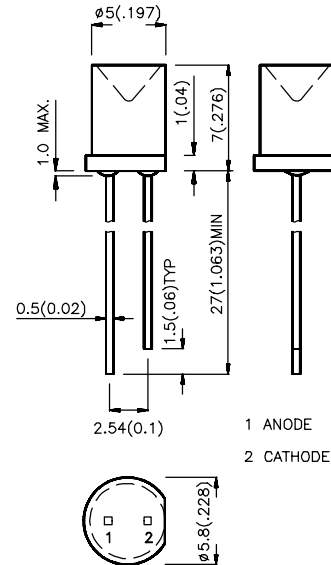
L493IT HIGH EFFICIENCY RED

L493Gx GREEN

L493EC HIGH EFFICIENCY RED

L493Yx YELLOW

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ 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) @ 10 mA		Viewing Angle
			Min.	Typ.	
L493IT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED TRANSPARENT	3	6	140°
L493EC		WATER CLEAR	3	6	140°
L493GT	GREEN (GaP)	GREEN TRANSPARENT	2	5	140°
L493GC		WATER CLEAR	2	5	140°
L493YT	YELLOW (GaAsP/GaP)	YELLOW TRANSPARENT	2	5	140°
L493YC		WATER CLEAR	2	5	140°

Note:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

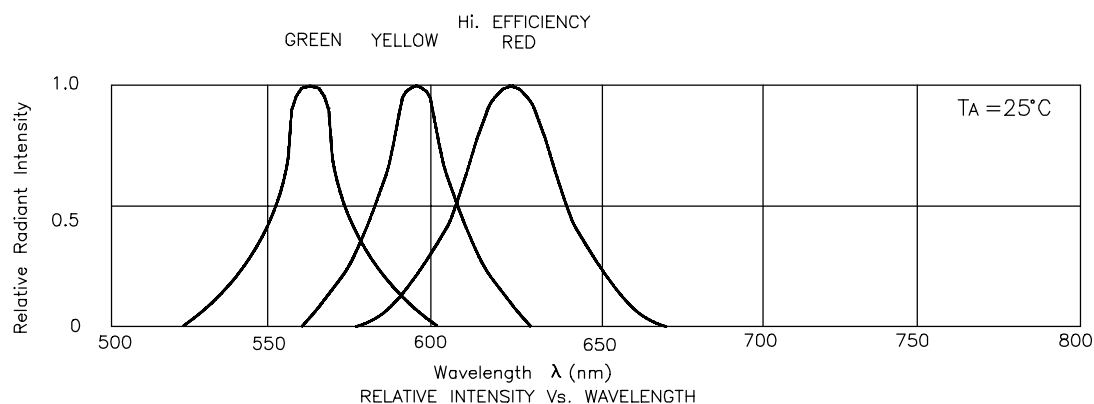
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green Yellow	625 565 590		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Green Yellow	12 45 10		pF	VF=0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red Green Yellow	2.0 2.2 2.1	2.5 2.5 2.5	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

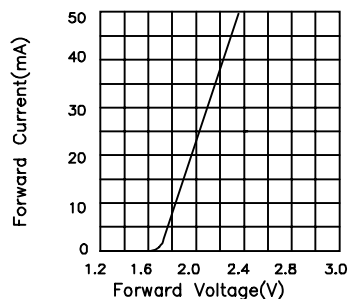
Parameter	High Efficiency Red	Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	150	150	150	mA
Reverse Voltage	5	5	5	V
Operation/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 5 Seconds			

Notes:

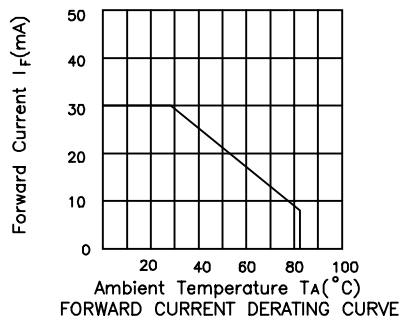
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



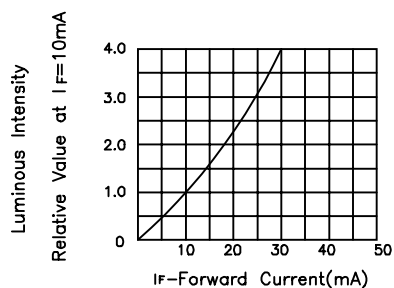
High Efficiency Red L493IT,L493EC



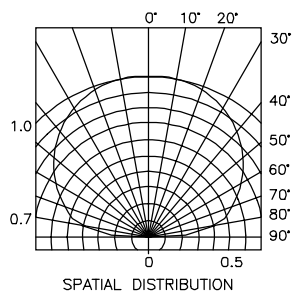
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

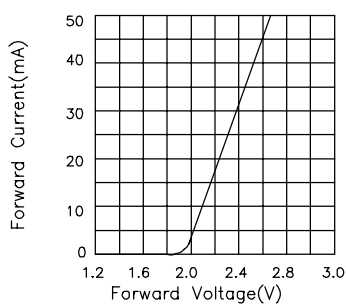


IF-Forward Current (mA)

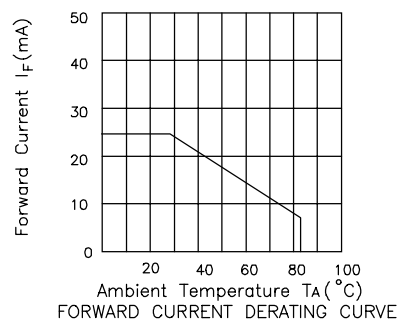


SPATIAL DISTRIBUTION

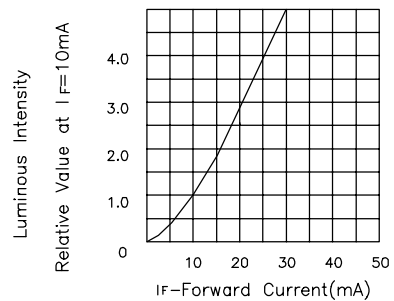
Green L493GC,L493GT



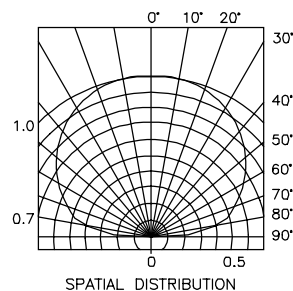
Forward Voltage (V)



FORWARD CURRENT DERATING CURVE

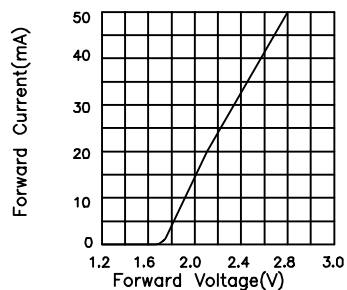


IF-Forward Current (mA)
LUMINOUS INTENSITY Vs. FORWARD CURRENT

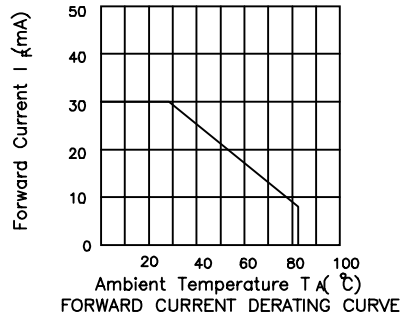


SPATIAL DISTRIBUTION

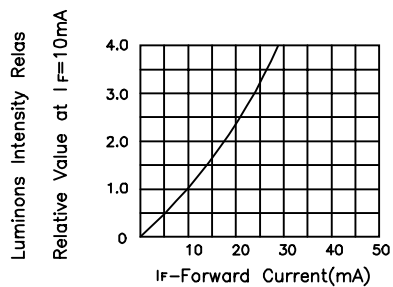
Yellow L493YC,L493YT



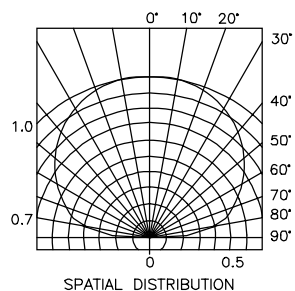
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION