2x3mm RECTANGULAR SOLID LAMP

W169XIT HIGH EFFICIENCY RED

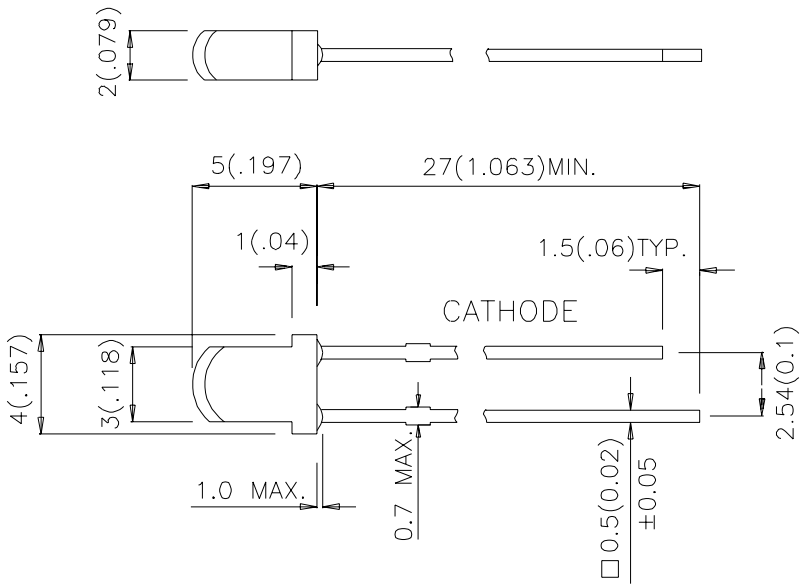
Features

- ●LOW POWER CONSUMPTION.
- ●ULTRA BRIGHTNESS IS AVAILABLE .
- ●RELIABLE AND RUGGED.
- ●EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- ●SUITABLE FOR LEVEL INDICATOR.
- ●LONG LIFE - SOLID STATE RELIABILITY.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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 subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	2θ1/2
W169XIT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED TRANSPARENT	12	30	30°

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

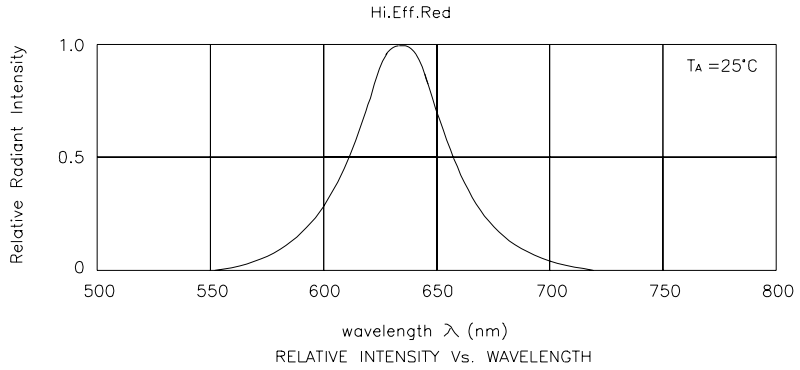
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	I_F=20mA
λ D	Dominate Wavelength	High Efficiency Red	625		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	I_F=20mA
C	Capacitance	High Efficiency Red	15		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red	2.0	2.5	V	I_F=20mA
I_R	Reverse Current	High Efficiency Red		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

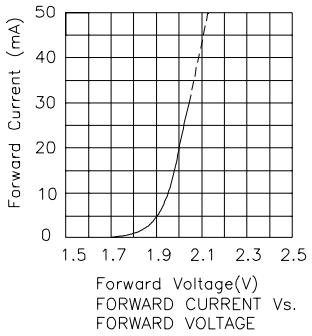
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

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

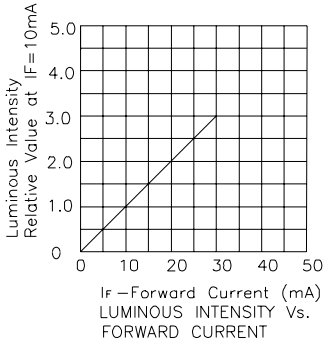


RELATIVE INTENSITY Vs. WAVELENGTH

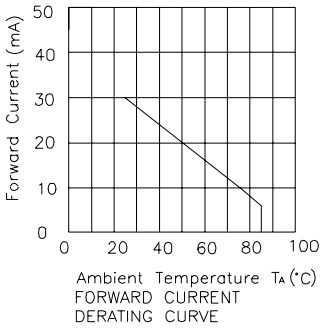
High Efficiency Red W169XIT



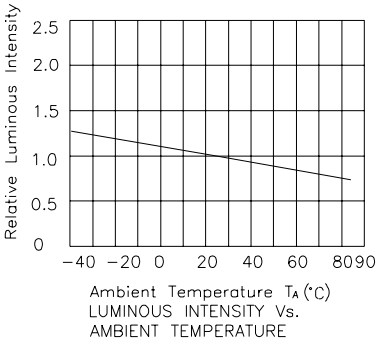
FORWARD CURRENT Vs.
FORWARD VOLTAGE



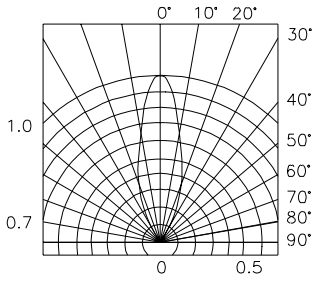
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION