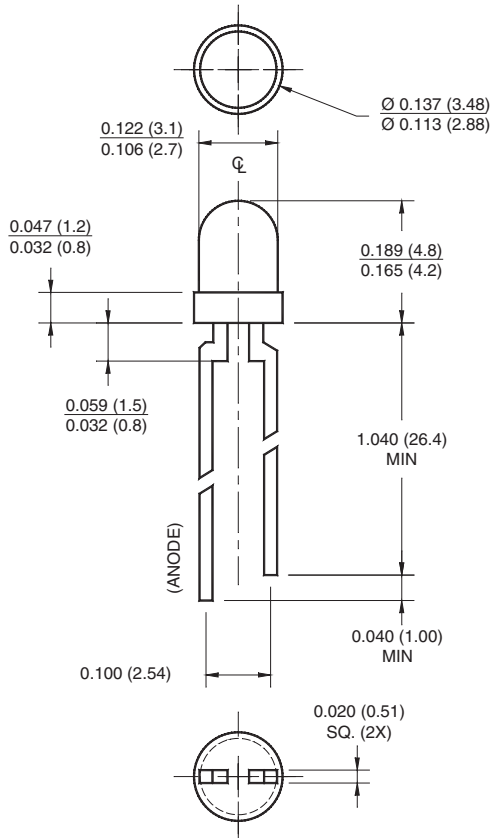


Green

MV7442

## PACKAGE DIMENSIONS



### NOTES:

1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5mm (0.059") max.



## DESCRIPTION

This T-100 green LED has a moderate viewing angle of 45°. It is encapsulated in an epoxy package with a water clear lens. The green diode chip is constructed with GaP technology and emits a dominant wavelength of 570nm.

## FEATURES

- Popular T-1 package
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing

**Green**

**MV7442**

**ABSOLUTE MAXIMUM RATINGS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	$T_{OPR}$	-40 to +85	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-40 to +100	$^\circ\text{C}$
Lead Soldering Time	$T_{SOL}$	260 for 5 sec	$^\circ\text{C}$
Continuous Forward Current	$I_F$	30	mA
Peak Forward Current ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	$I_{FM}$	120	mA
Reverse Voltage ( $I_R = 10 \mu\text{A}$ )	$V_R$	5	V
Power Dissipation	$P_D$	85	mW

**ELECTRICAL / OPTICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$ )

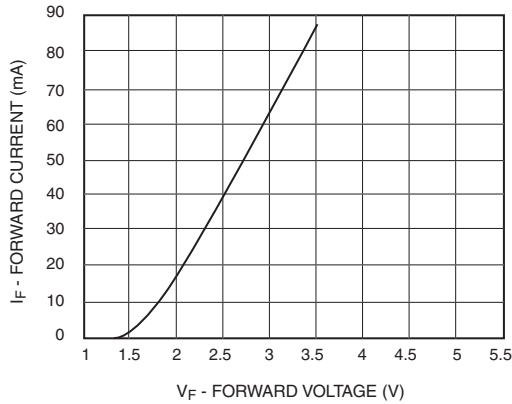
Part Number	MV7442	Condition
Luminous Intensity (mcd)		
Minimum	80	$I_F = 20 \text{ mA}$
Typical	120	
Forward Voltage (V)		
Maximum	2.8	$I_F = 20 \text{ mA}$
Typical	2.1	
Wavelength (nm)		
Peak	565	$I_F = 20 \text{ mA}$
Dominant	570	
Spectral Line Half Width (nm)	30	$I_F = 20 \text{ mA}$
Viewing Angle ( $^\circ$ )	45	$I_F = 20 \text{ mA}$

**Green**

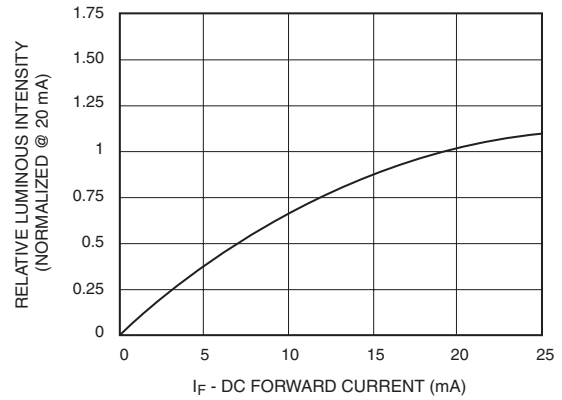
**MV7442**

**TYPICAL PERFORMANCE CURVES**

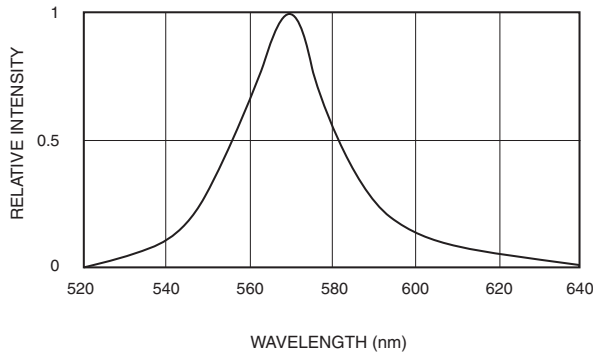
**Fig.1 Forward Current vs. Forward Voltage**



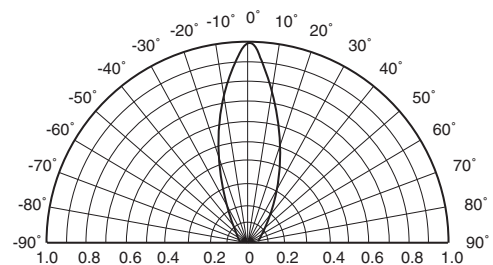
**Fig.2 Relative Luminous Intensity vs. DC Forward Current**



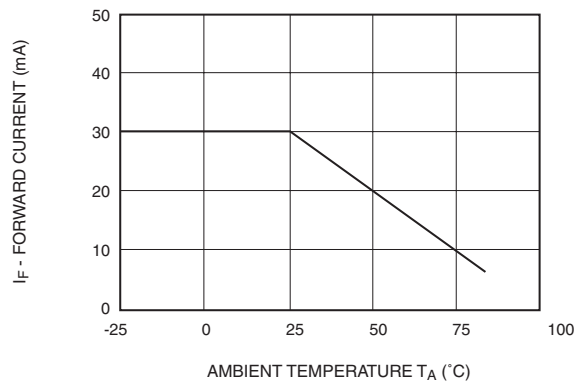
**Fig.3 Relative Intensity vs. Peak Wavelength**



**Fig. 4 Radiation Diagram**



**Fig.5 Current Derating Curve**



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**Green**

**MV7442**

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.