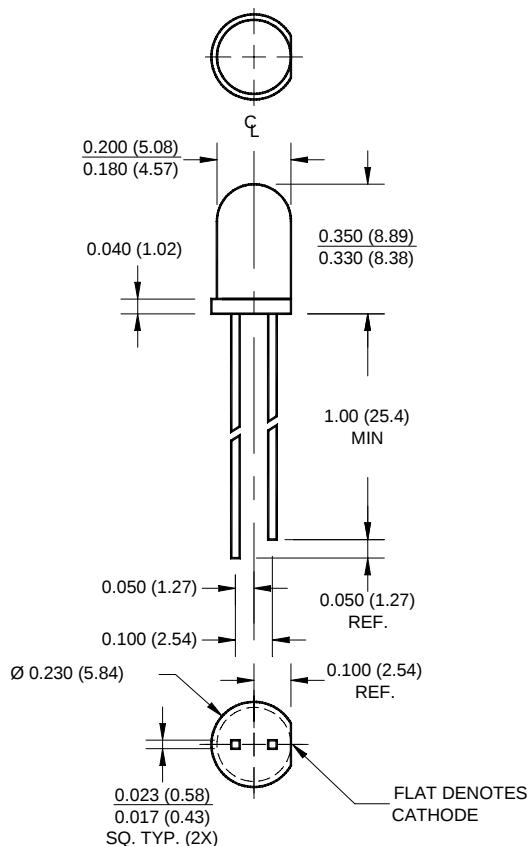


# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

## PACKAGE DIMENSIONS



### NOTES:

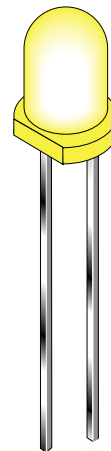
1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5 mm (0.059") max.

**SUPER YELLOW**  
**MV8341 MV8342**

**MV834X**

## FEATURES

- Popular T-1 3/4 package
- Super high brightness suitable for outdoor applications
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing



## DESCRIPTION

This T-1 3/4 super bright LED has a viewing angle of 45° for concentrated light output. The MV834X series is made with an AlInGaP LED that emits yellow light at 590 nm. It is encapsulated in a water clear epoxy lens package.

## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise specified)

| Parameter                                                 | Symbol           | Rating        | Unit |
|-----------------------------------------------------------|------------------|---------------|------|
| Operating Temperature                                     | T <sub>OPR</sub> | -40 to +100   | °C   |
| Storage Temperature                                       | T <sub>STG</sub> | -40 to +100   | °C   |
| Lead Soldering Time                                       | T <sub>SOL</sub> | 260 for 5 sec | °C   |
| Continuous Forward Current                                | I <sub>F</sub>   | 30            | mA   |
| Peak Forward Current<br>(f = 1.0 KHz, Duty Factor = 1/10) | I <sub>F</sub>   | 160           | mA   |
| Reverse Voltage                                           | V <sub>R</sub>   | 5             | V    |
| Power Dissipation                                         | P <sub>D</sub>   | 85            | mW   |

# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

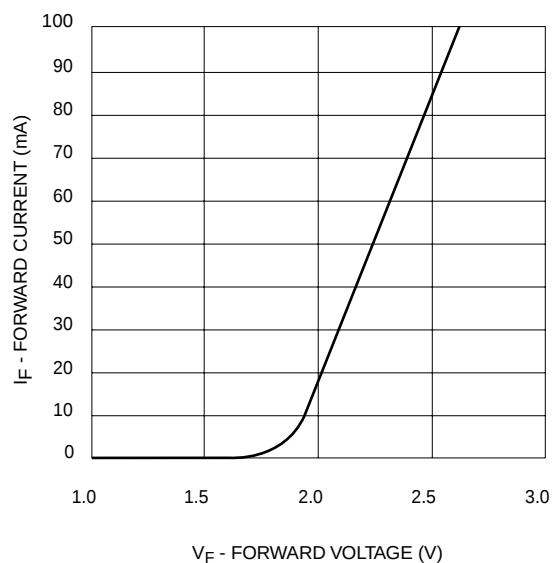
**SUPER YELLOW**  
**MV8341 MV8342**

**MV834X**

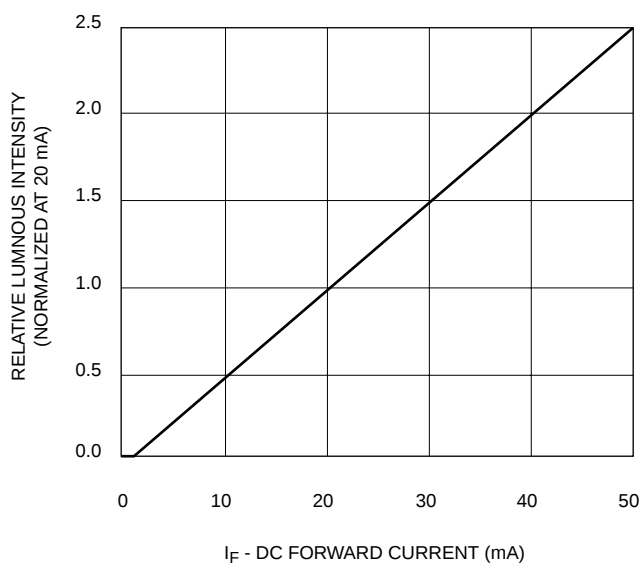
## ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> = 25°C)

| Part Number                   | MV8341 | MV8342 | Condition              |
|-------------------------------|--------|--------|------------------------|
| Luminous Intensity (mcd)      |        |        | I <sub>F</sub> = 20 mA |
| Minimum                       | 160    | 250    |                        |
| Typical                       | 240    | 370    |                        |
| Forward Voltage (V)           |        |        | I <sub>F</sub> = 20 mA |
| Maximum                       | 2.8    | 2.8    |                        |
| Typical                       | 2.1    | 2.1    |                        |
| Peak Wavelength (nm)          | 590    | 590    | I <sub>F</sub> = 20 mA |
| Spectral Line Half Width (nm) | 15     | 15     | I <sub>F</sub> = 20 mA |
| Viewing Angle (°)             | 45     | 45     | I <sub>F</sub> = 20 mA |

## TYPICAL PERFORMANCE CURVES



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

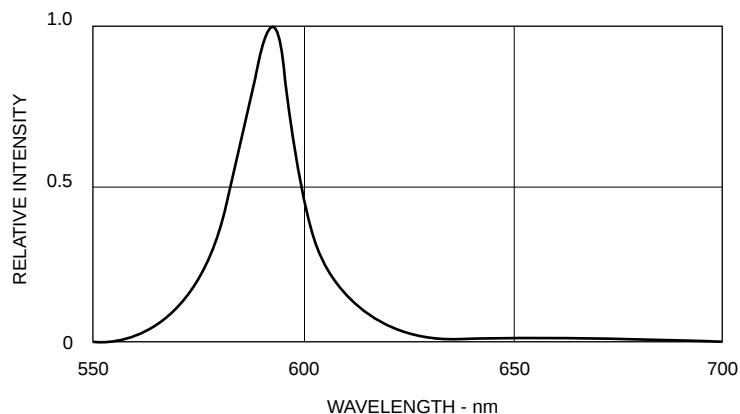


**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**

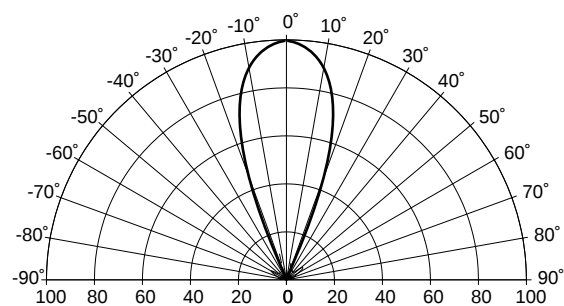
# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

**SUPER YELLOW**  
**MV8341 MV8342**

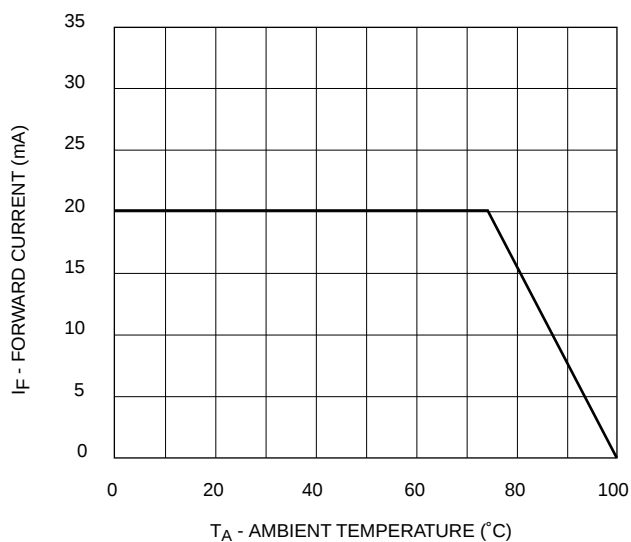
**MV834X**



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



**Fig. 4 Radiation Diagram**



**Fig. 5 Current Derating Curve**

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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.