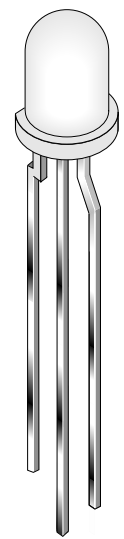
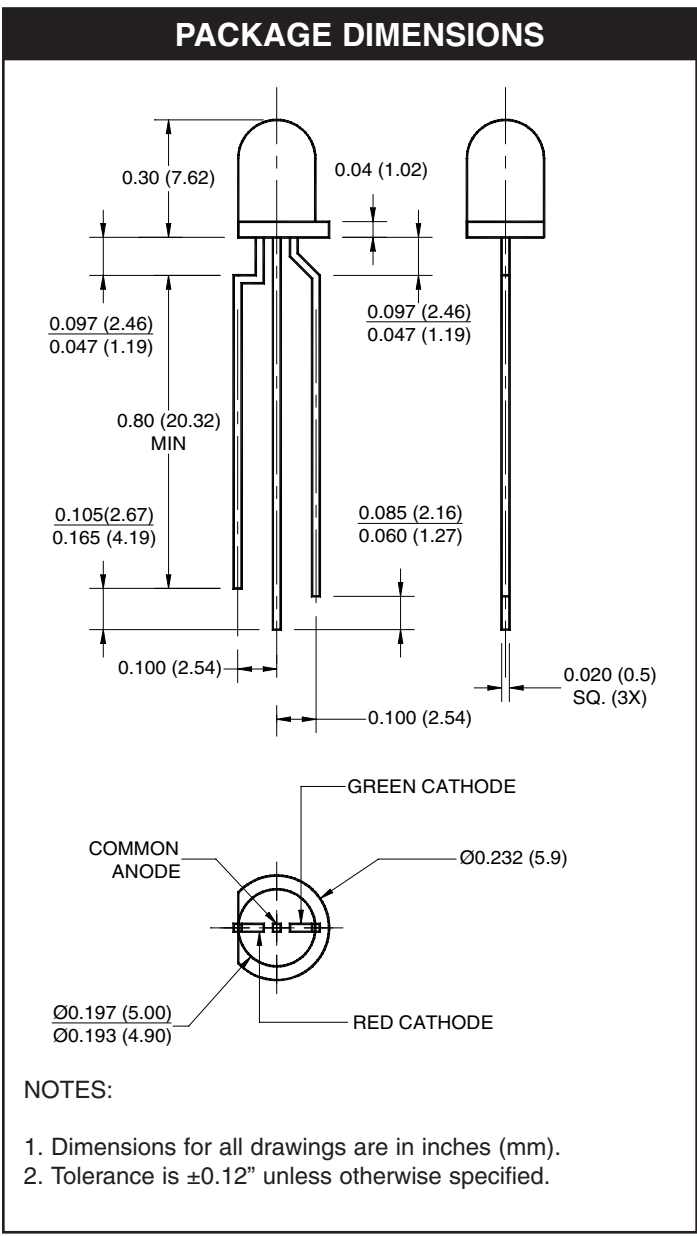


# 3 LEAD BICOLOR T-1 3/4 (5 mm) SOLID STATE LAMPS

**GREEN / AlGaAs RED** **MV5439A**



**FEATURES**

- Popular T-1 3/4 package
- Wide viewing angle
- Solid state reliability
- TTL compatible

**DESCRIPTION**

The MV5439A is a three-lead bicolor T-1 3/4 (5mm) lamp with a central common anode lead. Each lamp comes with a white diffused lens and has a 100° viewing angle.

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

Parameter	AlGaAs Red	Green	Units
Continuous Forward Current - $I_F$	30	30	mA
Peak Forward Current - $I_F$ ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	90	90	mA
Reverse Voltage - $V_R$ ( $I_R = 10 \mu\text{A}$ )	5	5	V
Power Dissipation - $P_D$	120	120	mW
Operating Temperature - $T_{OPR}$	-55 to +100		$^\circ\text{C}$
Storage Temperature - $T_{STG}$	-55 to +100		$^\circ\text{C}$
Lead Soldering Time - $T_{SOL}$	260 for 5 sec		$^\circ\text{C}$

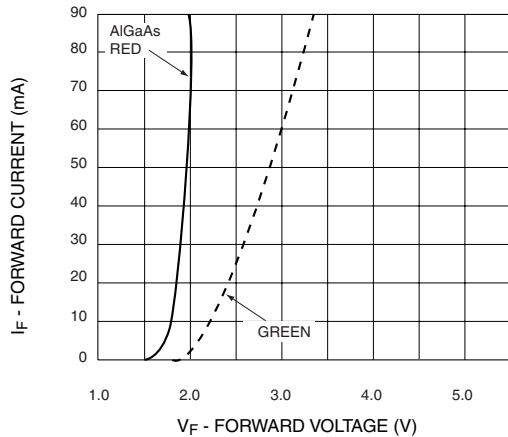
**GREEN / AlGaAs RED**

**MV5439A**

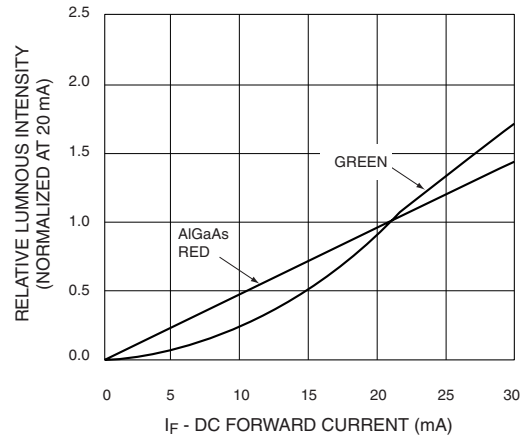
**ELECTRICAL / OPTICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C)

Part Number	MV5439A Grn/AlGaAs Red	Condition
Luminous Intensity (mcd)		I <sub>F</sub> = 20 mA
Minimum	2/10	
Typical	6/25	
Forward Voltage (V)		I <sub>F</sub> = 20 mA
Maximum	3.0/2.4	
Typical	2.3/1.7	
Chromatic Coordinates - Typical	X = 0.27, Y = 0.28	I <sub>F</sub> = 20 mA
Wavelength (nm)	565/660	I <sub>F</sub> = 20 mA
Spectral Line Half Width (nm)	30/20	I <sub>F</sub> = 20 mA
Viewing Angle (°)	100	I <sub>F</sub> = 20 mA

**TYPICAL PERFORMANCE CURVES**



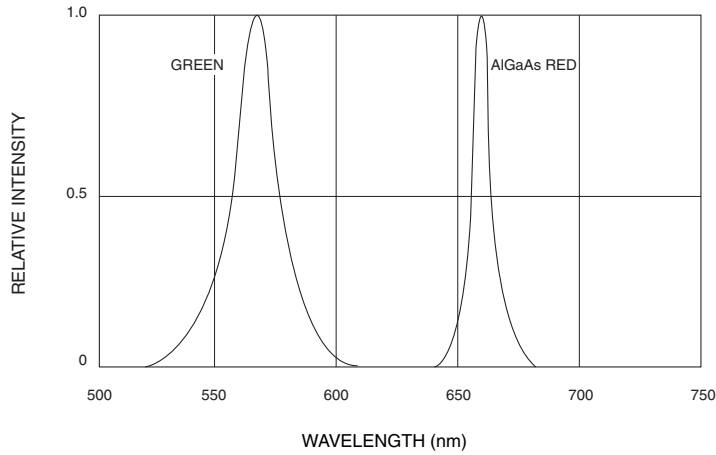
**Fig. 1 Forward Current vs. Forward Voltage**



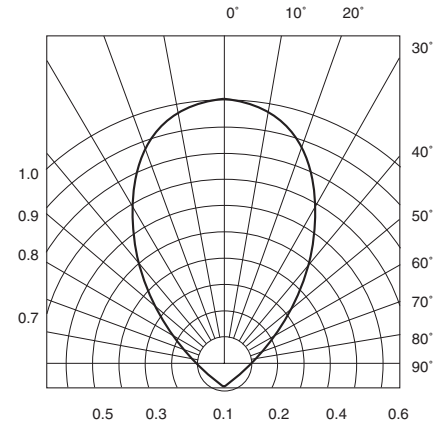
**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**

**GREEN / AlGaAs RED**

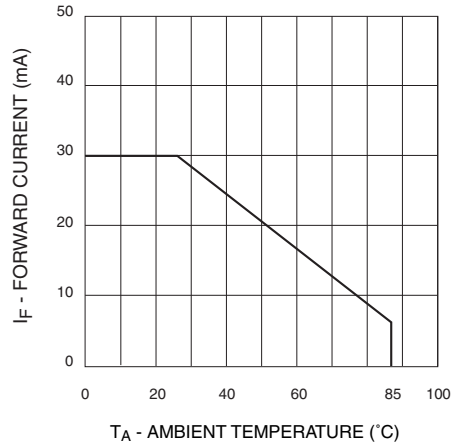
**MV5439A**



**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.