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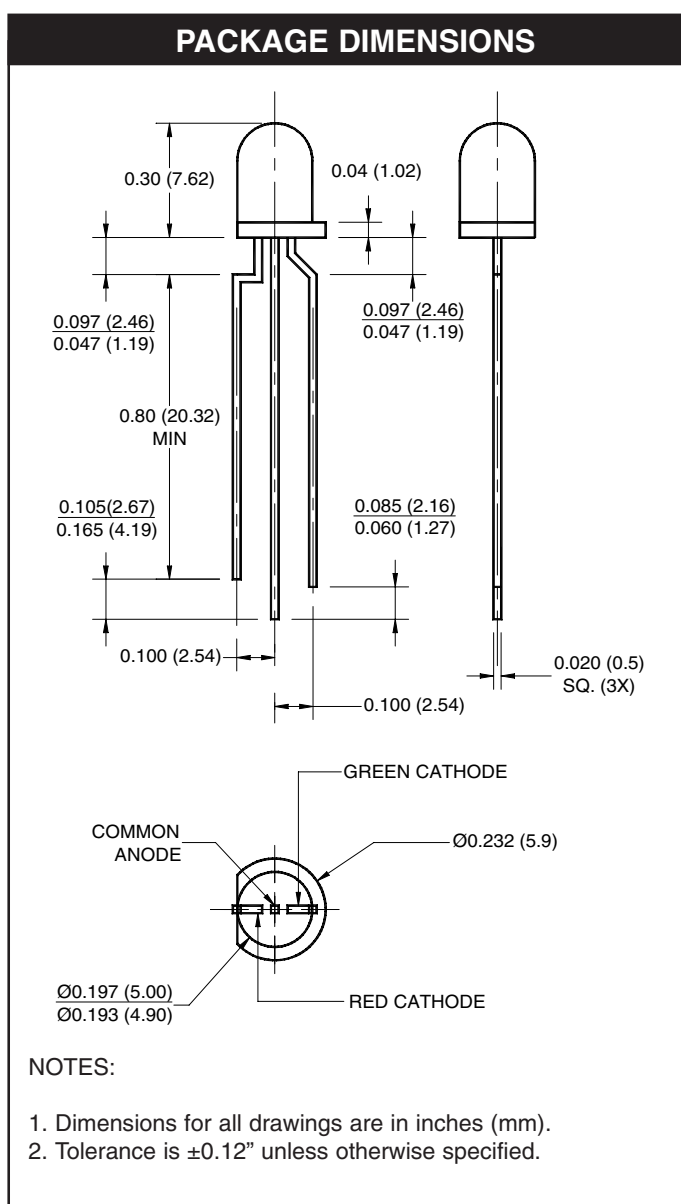
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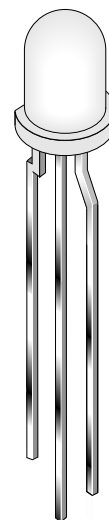
# 3 LEAD BICOLOR T-1 3/4 (5 mm) SOLID STATE LAMPS



**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.

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A = 25^\circ\text{C}$ 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		$^\circ\text{C}$



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**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

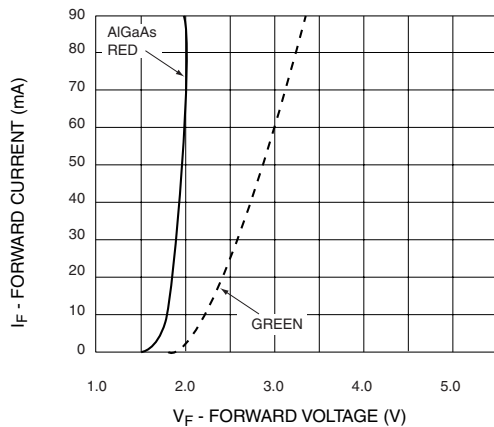


Fig. 1 Forward Current vs. Forward Voltage

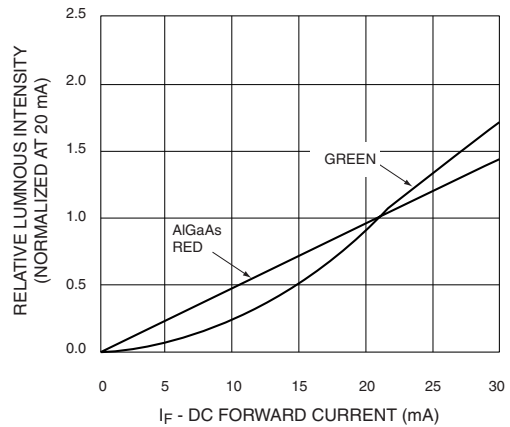
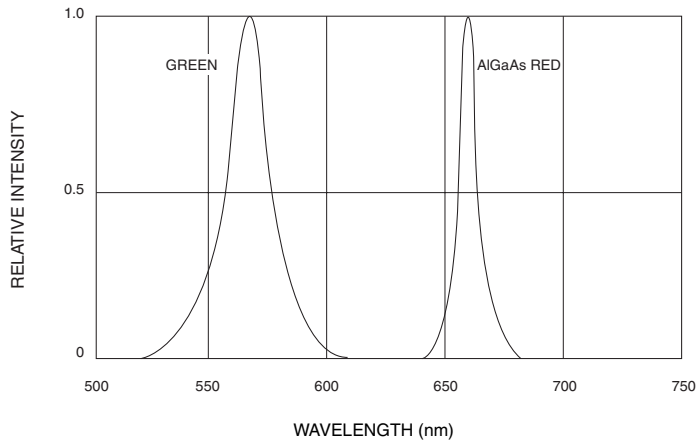


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

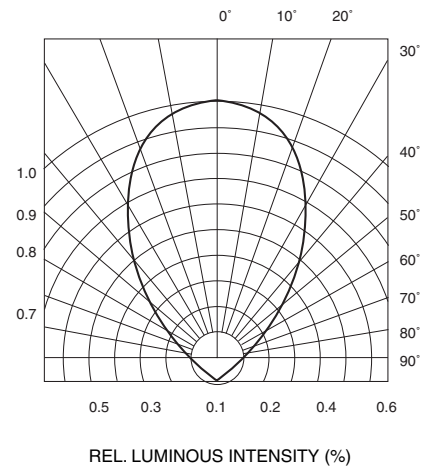
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**GREEN / AlGaAs RED**

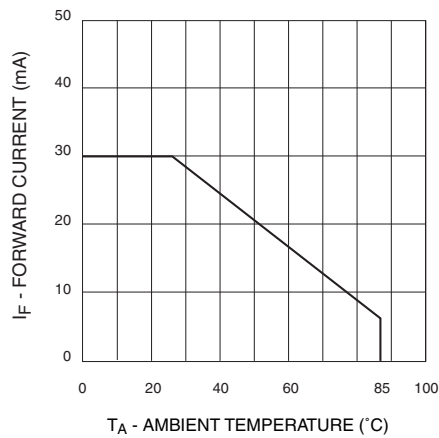
**MV5439A**



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



**Fig. 4 Radiation Diagram**



**Fig. 5 Current Derating Curve**



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