

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

PACKAGE DIMENSIONS 0.04 (1.02) 0.30 (7.62) 0.097 (2.46) 0.097 (2.46) 0.047 (1.19) 0.047 (1.19) 0.80 (20.32) MIN 0.085 (2.16) 0.105(2.67) 0.165 (4.19) 0.060 (1.27) 0.100 (2.54) 0.020 (0.5) SQ. (3X) 0.100 (2.54) GREEN CATHODE COMMON Ø0.232 (5.9) ANODE Ø0.197 (5.00) **RED CATHODE** Ø0.193 (4.90) NOTES:

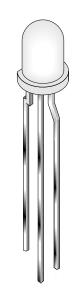
1. Dimensions for all drawings are in inches (mm).

2. Tolerance is ±0.12" unless otherwise specified.

GREEN / AIGaAs 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°C unless otherwise specified)				
Parameter	AlGaAs Red	Green	Units	
Continuous Forward Current - I _F	30	30	mA	
Peak Forward Current - I _F	90	90	mA	
(f = 1.0 KHz, Duty Factor = 1/10)				
Reverse Voltage - V _R (I _R = 10 μA)	5	5	V	
Power Dissipation - P _D	120	120	mW	
Operating Temperature - T _{OPR}	-55 to +100		°C	
Storage Temperature - T _{STG}	-55 to +100		°C	
Lead Soldering Time - T _{SOL}	260 for 5 sec		°C	



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

TYPICAL PERFORMANCE CURVES

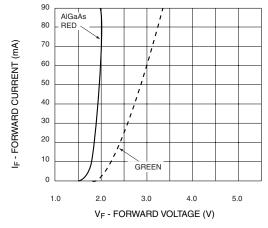


Fig. 1 Forward Current vs. Forward Voltage

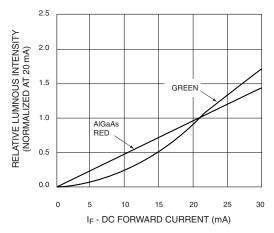


Fig. 2 Relative Luminous Intensity vs.
DC Forward Current



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GREEN / AIGaAs RED

MV5439A

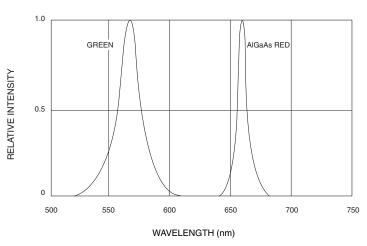


Fig. 3 Relative Intensity vs. Peak Wavelength

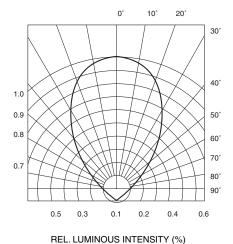


Fig. 4 Radiation Diagram

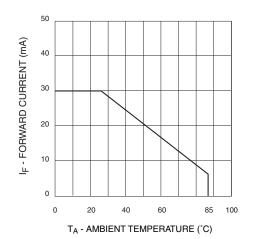


Fig. 5 Current Derating Curve



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