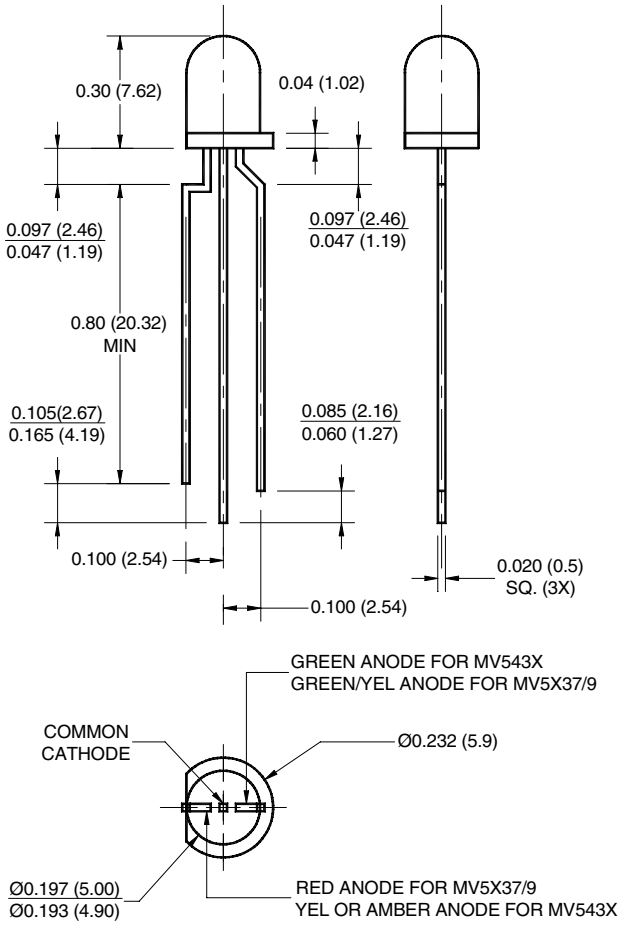
FAIRCHILD
SEMICONDUCTOR®

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

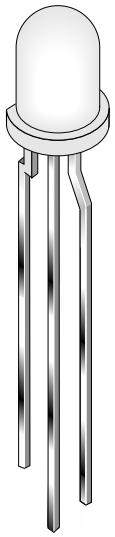
GREEN / YELLOW	MV5433
GREEN / ORANGE	MV5438
YELLOW / HER	MV5337
GREEN / HER	MV5437
GREEN / AlGaAs RED	MV5439

PACKAGE DIMENSIONS



NOTES:

1. Dimensions for all drawings are in inches (mm).
2. Tolerance is ±0.12” unless otherwise specified.



FEATURES

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

DESCRIPTION

The MV5X3X T-1 3/4 (5 mm) lamp is a three-lead bicolor light source with a central common cathode 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	HER	Green	Yellow	Orange	Units
Continuous Forward Current (I_F)	30	30	30	20	30	mA
Peak Forward Current (I_F) (f = 1.0 KHz, Duty Factor = 1/10)	90	90	90	60	90	mA
Power Dissipation (P_D)	120	120	120	85	100	mW
Reverse Voltage (V_R)	5	5	5	5	5	V
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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GREEN / HER	**MV5437**
GREEN / AlGaAs RED	**MV5439**

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	MV5437 Grn/HER	MV5337 Yel/HER	MV5433 Grn/Yel	MV5438 Grn/Orange	MV5439 Grn/AlGaAs Red	Condition
Luminous Intensity (mcd)						I_F = 20 mA
Minimum	2/2	2/2	2/2	2/2	2/10	
Typical	6/6	6/6	6/6	6/6	6/25	
Forward Voltage (V)						I_F = 20 mA
Maximum	3.0/3.0	3.0/3.0	3.0/3.0	3.0/3.0	3.0/2.4	
Typical	2.1/2.1	2.1/2.1	2.3/2.3	2.3/2.3	2.3/1.7	
Peak Wavelength (nm)	565/635	585/635	565/585	565/610	565/660	I_F = 20 mA
Spectral Line Half Width (nm)	30/45	35/45	30/35	30/40	30/20	I_F = 20 mA
Viewing Angle (°)	100°	100°	100°	100°	100°	I_F = 20 mA

TYPICAL PERFORMANCE CURVES

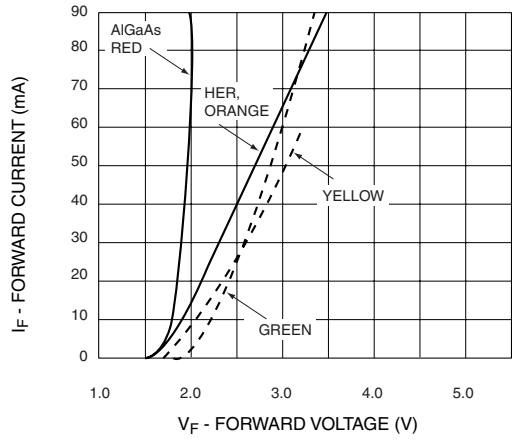


Fig. 1 Forward Current vs. Forward Voltage

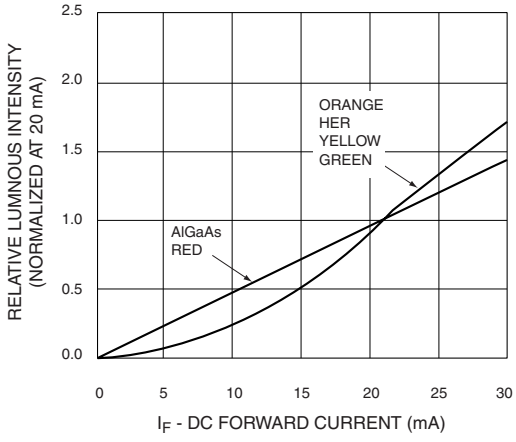


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

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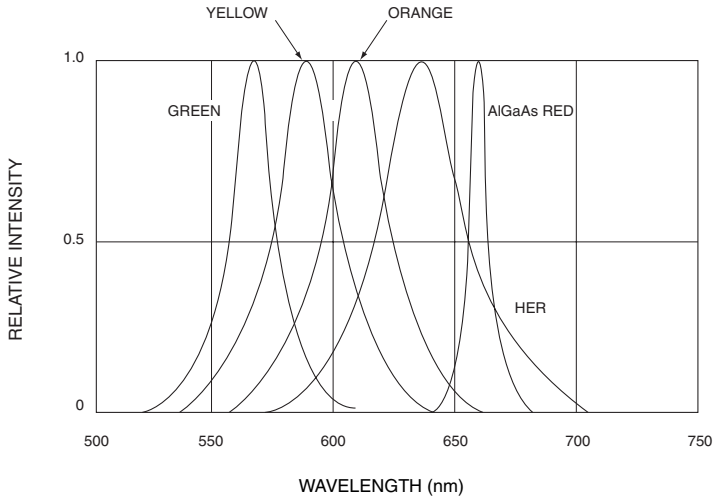


Fig. 3 Relative Intensity vs. Peak Wavelength

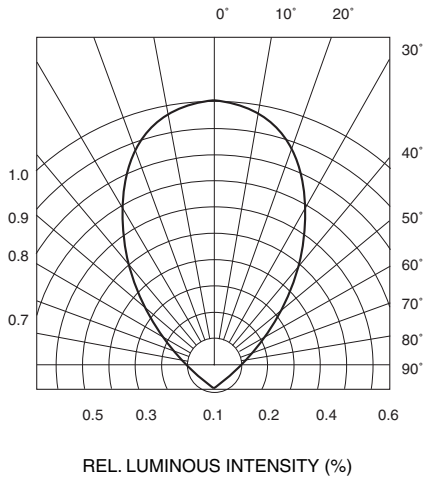


Fig. 4 Radiation Diagram

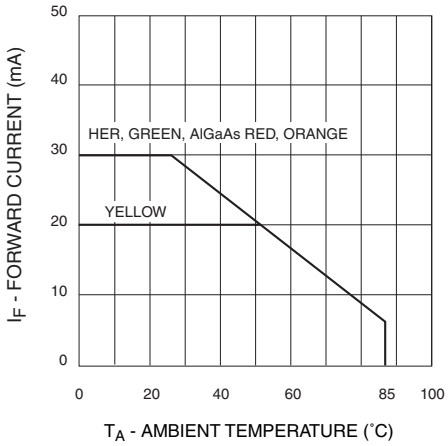


Fig. 5 Current Derating Curve

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GREEN / AlGaAs RED	**MV5439**

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