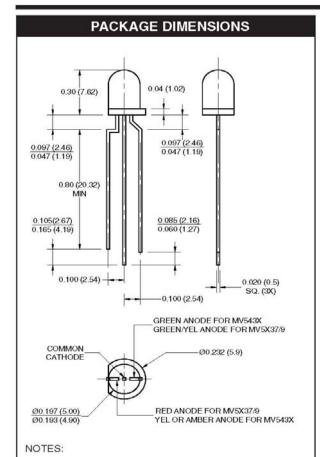


# ERLIGHT 3 LEAD BICOLOR T-1 3/4 (5 mm) **SOLID STATE LAMPS**



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

2. Tolerance is ±0.12" unless otherwise specified.

**GREEN / YELLOW** MV5433 **GREEN / ORANGE** MV5438 YELLOW / HER MV5337 GREEN / HER MV5437 GREEN / AIGaAs RED MV5439

### **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.

Parameter	AIGaAs RED	HER	Green	Yellow	Orange	Units	
Continuous Forward Current (I <sub>F</sub> )	30	30	30	20	30	mA	
Peak Forward Current (I <sub>F</sub> ) (f = 1.0 KHz, Duty Factor = 1/10)	90	90	90	60	90	mA	
Power Dissipation (PD)	120	120	120	85	100	mW	
Reverse Voltage (V <sub>R</sub> )	5	5	5	5	5	٧	
Operating Temperature (T <sub>OPR</sub> )	-55 to +100						
Storage Temperature (T <sub>STG</sub> )	-55 to +100						
Lead Soldering Time (T <sub>SOL</sub> )	260 for 5 sec						



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

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)										
Part Number	MV5437	MV5337	MV5433	MV5438	MV5439					
	Grn/HER	Yel/HER	Grn/Yel	Grn/Orange	Grn/AlGaAs Red	Condition				
Luminous Intensity (mcd)						I <sub>F</sub> = 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 <sub>F</sub> = 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 <sub>F</sub> = 20 mA				
Spectral Line Half Width (nm)	30/45	35/45	30/35	30/40	30/20	I <sub>F</sub> = 20 mA				
Viewing Angle (°)	100°	100°	100°	100°	100°	I <sub>F</sub> = 20 mA				

## **TYPICAL PERFORMANCE CURVES**

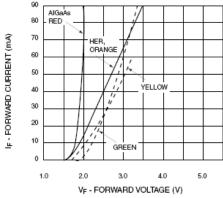


Fig. 1 Forward Current vs. Forward Voltage

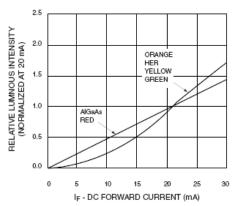


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



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

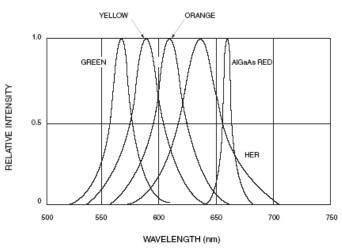


Fig. 3 Relative Intensity vs. Peak Wavelength

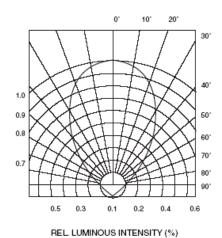


Fig. 4 Radiation Diagram

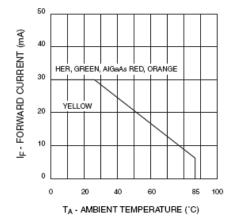


Fig. 5 Current Derating Curve



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