



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

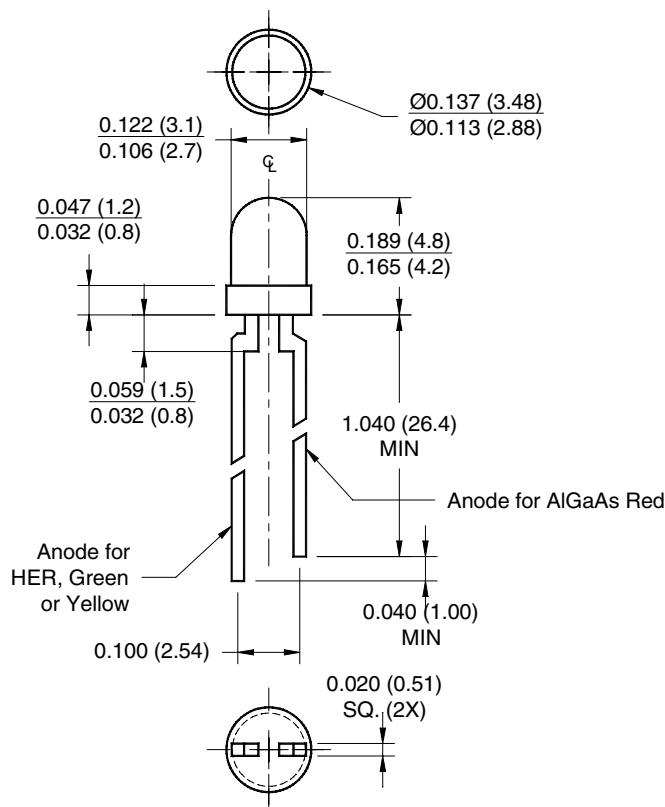
Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# BICOLOR T-100 (3 mm) SOLID STATE LED LAMPS

## PACKAGE DIMENSIONS



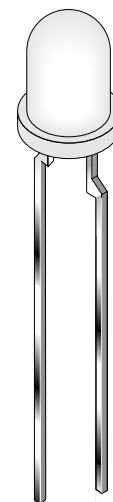
### NOTES:

1. Dimensions for all drawings are in inches (mm).
2. Tolerance is  $\pm 0.12''$  unless otherwise specified.

HER / AlGaAs RED	MV6661A
GREEN / AlGaAs RED	MV6461A
YELLOW / AlGaAs RED	MV6361A

## FEATURES

- Excellent luminous uniformity
- Wide viewing angle
- Solid state reliability



## DESCRIPTION

The MV6X61A series is a bicolor, bipolar LED lamp with a wide viewing angle of 100°. In particular, MV6461A offers 4 states - green, red, orange (when AC driven) and off.

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

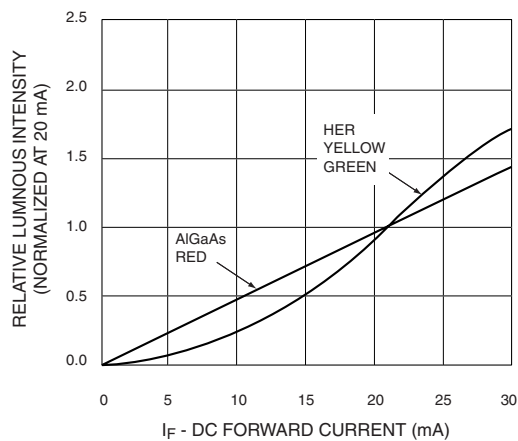
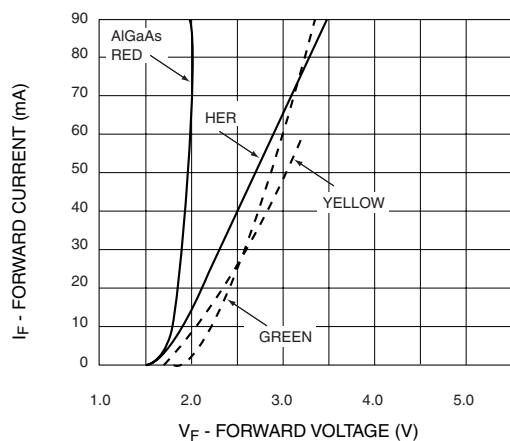
Parameter	AlGaAs Red	HER	Green	Yellow	Units
Continuous Forward Current - $I_F$	30	30	30	25	mA
Peak Forward Current - $I_F$ ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	90	90	90	60	mA
Reverse Voltage - $V_R$ ( $I_R = 10 \mu\text{A}$ )	5	5	5	5	V
Power Dissipation - $P_D$	135	135	135	95	mW
Operating Temperature - $T_{OPR}$	-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				$^\circ\text{C}$

HER / AlGaAs RED	MV6661A
GREEN / AlGaAs RED	MV6461A
YELLOW / AlGaAs RED	MV6361A

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

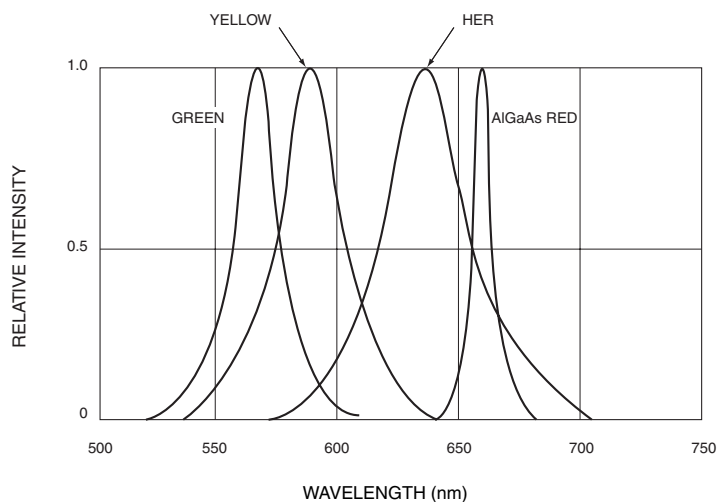
Part Number	MV6661A HER / AlGaAs Red	MV6461A Green / AlGaAs Red	MV6361A Yellow / AlGaAs Red	Condition
Luminous Intensity (mcd)				I <sub>F</sub> = 20 mA
Minimum	2.5/2.5	2.5/2.5	2.5/2.5	
Typical	10/10	10/10	10/10	
Forward Voltage (V)				I <sub>F</sub> = 20 mA
Maximum	3.0/2.4	3.0/2.4	3.0/2.4	
Typical	2.1/1.7	2.1/1.7	2.1/1.7	
Peak Wavelength (nm)	635/660	565/660	585/660	I <sub>F</sub> = 20 mA
Spectral Line Half Width (nm)	45/20	30/20	35/20	I <sub>F</sub> = 20 mA
Viewing Angle (°)	100°	100°	100°	I <sub>F</sub> = 20 mA

## TYPICAL PERFORMANCE CURVES

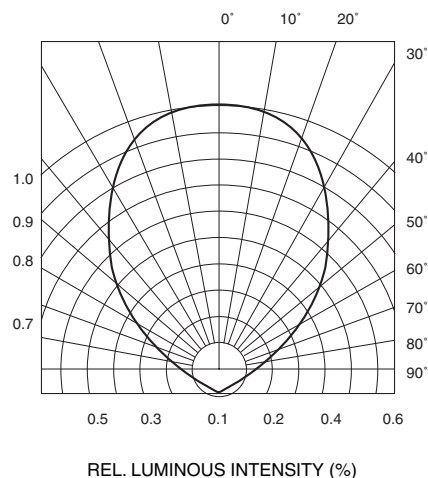


HER / AlGaAs RED  
GREEN / AlGaAs RED  
YELLOW / AlGaAs RED

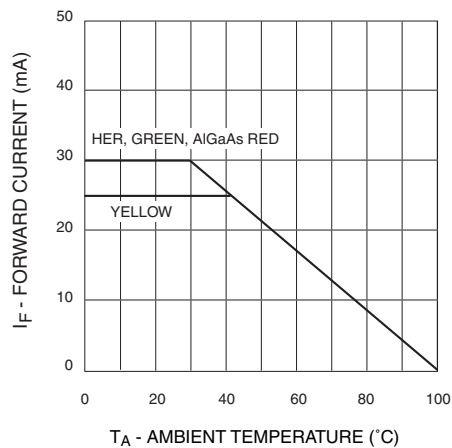
MV6661A  
MV6461A  
MV6361A



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



**Fig. 4 Radiation Diagram**



**Fig. 5 Current Derating Curve**



HER / AlGaAs RED	MV6661A
GREEN / AlGaAs RED	MV6461A
YELLOW / AlGaAs RED	MV6361A

## DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

## LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in labeling, can be reasonably expected to result in a significant injury of the user.
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.