



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

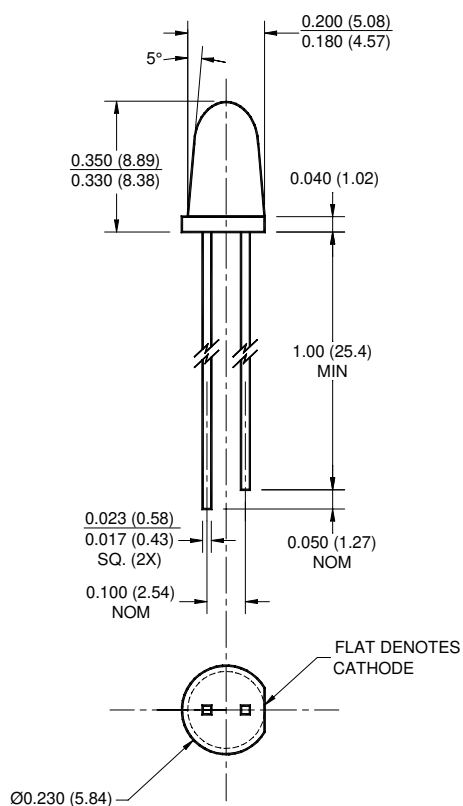
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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



SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

PACKAGE DIMENSIONS



NOTES:

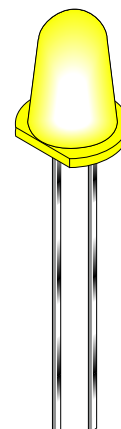
1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5 mm (0.059") max.

SUPER YELLOW
MV8313 MV8314
MV8315 MV8316
MV8317

MV831X

FEATURES

- Popular T-1 3/4 package
- Super high brightness suitable for outdoor applications
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing



DESCRIPTION

This T-1 3/4 super bright LED has a narrow viewing angle of 12° for concentrated light output. The MV831X series is made with an AlInGaP LED that emits yellow light at 590 nm. It is encapsulated in a water clear epoxy lens package.

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T _{OPR}	-40 to +100	°C
Storage Temperature	T _{STG}	-40 to +100	°C
Lead Soldering Time	T _{SOL}	260 for 5 sec	°C
Continuous Forward Current	I _F	30	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I _F	160	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	85	mW

SUPER BRIGHT T-1 3/4 (5 mm)

LED LAMP - Water Clear

SUPER YELLOW
MV8313 MV8314
MV8315 MV8316
MV8317

MV831X

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Part Number	MV8313	MV8314	MV8315	MV8316	MV8317	Condition
Luminous Intensity (mcd)						I _F = 20 mA
Minimum	630	1000	1600	2500	4500	
Typical	940	1500	2400	3500	5500	
Forward Voltage (V)						I _F = 20 mA
Maximum	2.8	2.8	2.8	2.8	2.8	
Typical	2.1	2.1	2.1	2.1	2.1	
Peak Wavelength (nm)	590	590	590	590	590	I _F = 20 mA
Spectral Line Half Width (nm)	15	15	15	15	15	I _F = 20 mA
Viewing Angle (°)	12	12	12	12	12	I _F = 20 mA

TYPICAL PERFORMANCE CURVES

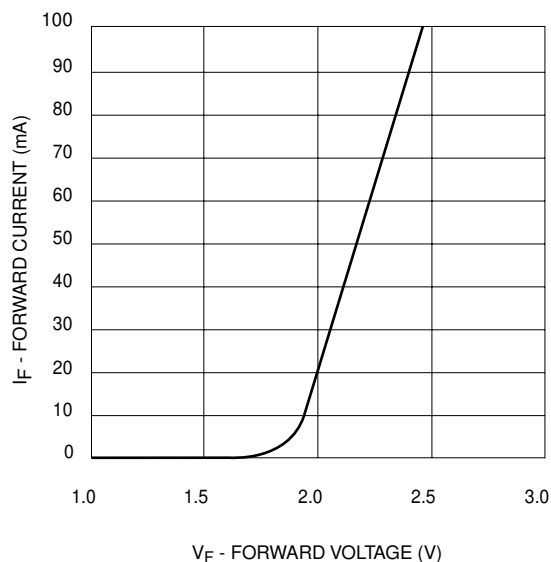


Fig. 1 Forward Current vs. Forward Voltage

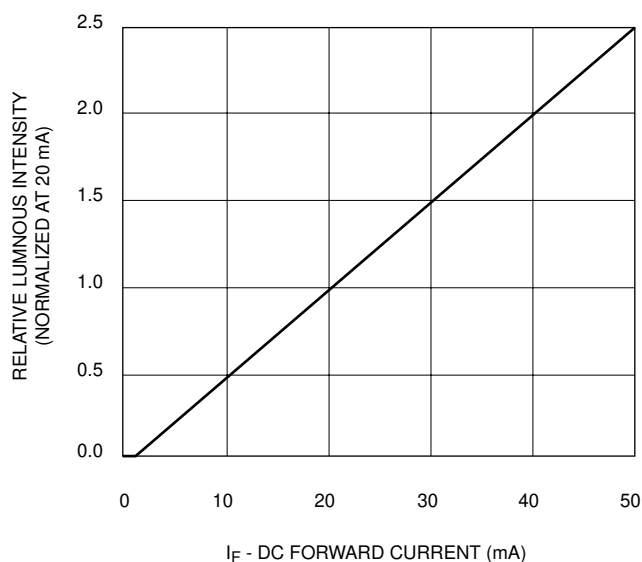


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

SUPER YELLOW **MV831X**
MV8313 MV8314
MV8315 MV8316
MV8317

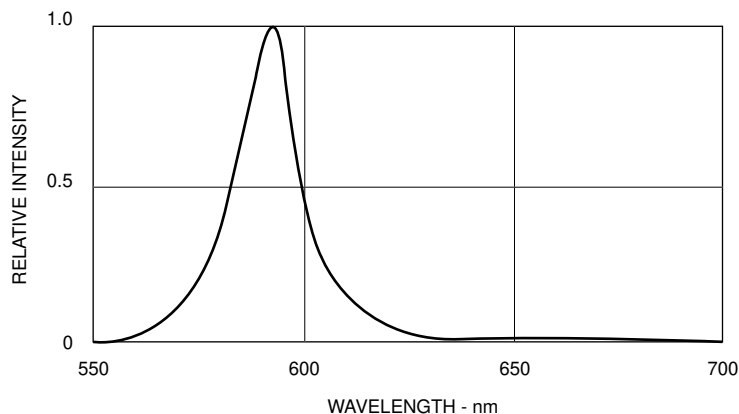


Fig. 3 Relative Intensity vs Peak Wavelength

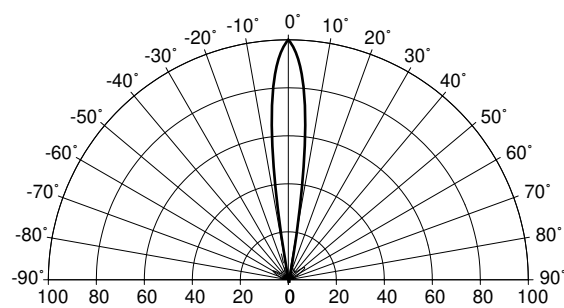


Fig. 4 Radiation Diagram

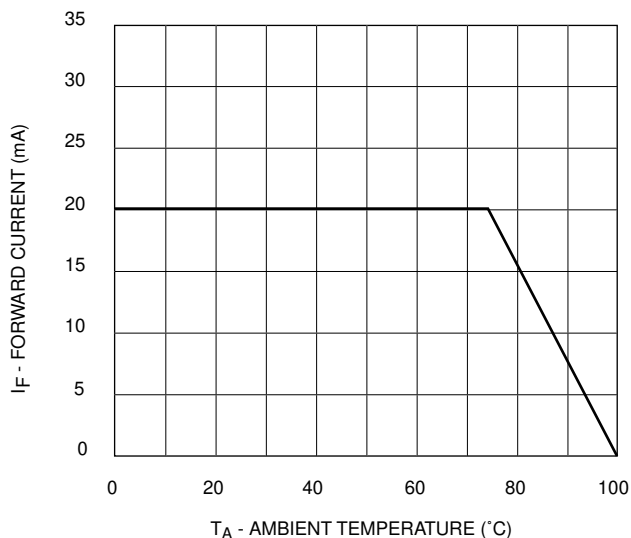


Fig. 5 Current Derating Curve

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 the 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.