

SUPER YELLOW

MV8313 MV8314

MV8315 MV8316

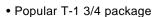
LED LAMP - Water Clear

0.350 (8.89) 0.330 (8.38) 0.040 (1.02)

0.050 (1.27)

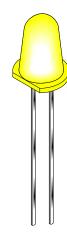
NOM

FLAT DENOTES CATHODE FEATURES



MV8317

- Super high brightness suitable for outdoor applications
- · Solid state reliability
- · Water clear optics
- · Standard 100 mil. lead spacing



MV831X

NOTES:

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

0.023 (0.58) 0.017 (0.43)

SQ. (2X)

0.100 (2.54)

Ø0.230 (5.84)

- 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.

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 AllnGaP 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	1	160	mA				
(f = 1.0 KHz, Duty Factor = 1/10)	l _F	100	IIIA				
Reverse Voltage	V _R	5	V				
Power Dissipation	P _D	85	mW				



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ELECTRICAL / OPTICAL CHARACTERISTICS (TA =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)						$I_F = 20 \text{ mA}$	
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

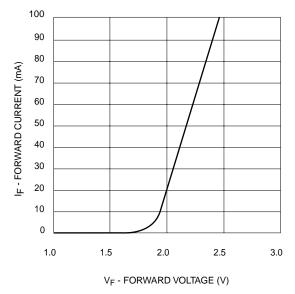


Fig. 1 Forward Current vs. Forward Voltage

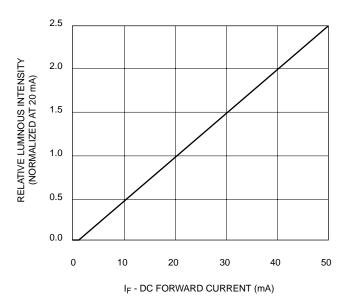
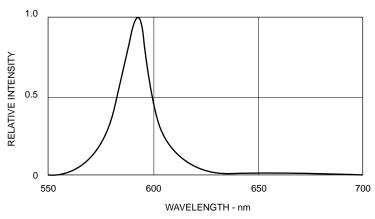


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



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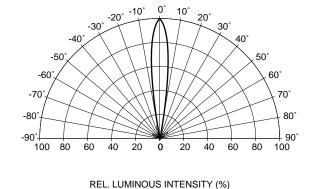


Fig. 3 Relative Intensity vs Peak Wavelength

Fig. 4 Radiation Diagram

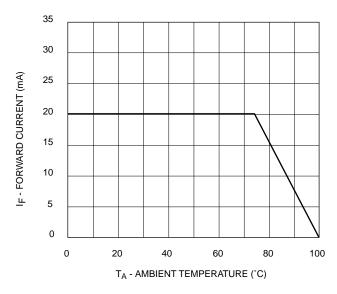


Fig. 5 Current Derating Curve



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