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LED LAMP - Water Clear

PACKAGE DIMENSIONS 0.200 (5.08) 0.180 (4.57) 0.350 (8.89) 0.040 (1.02) 0.330 (8.38) 1.00 (25.4) MIN 0.050 (1.27) 0.050 (1.27) RFF 0.100 (2.54) 0.100 (2.54) Ø 0.230 (5.84) FLAT DENOTES 0.023 (0.58) 0.017 (0.43) SQ. TYP. (2X) CATHODE

SUPER YELLOW MV833X MV8331 MV8332 MV8333

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



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.

DESCRIPTION

This T-1 3/4 super bright LED has a moderate viewing angle of 30° for concentrated light output. The MV830X 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 le	100	IIIA			
Reverse Voltage	V _R	5	V			
Power Dissipation	P _D	85	mW			

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SUPER YELLOW MV8331 MV8332 MV8333 **MV833X**

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)					
Part Number	MV8331	MV8332	MV8333	Condition	
Luminous Intensity (mcd)				$I_F = 20mA$	
Minimum	400	630	1000		
Typical	630	940	1500		
Forward Voltage (V)				$I_F = 20mA$	
Maximum	2.8	2.8	2.8		
Typical	2.1	2.1	2.1		
Peak Wavelength (nm)	590	590	590	$I_F = 20mA$	
Spectral Line Half Width (nm)	15	15	15	$I_F = 20mA$	
Viewing Angle (°)	30	30	30	$I_F = 20mA$	

TYPICAL PERFORMANCE CURVES

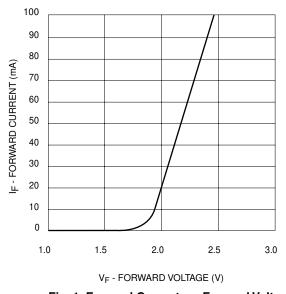


Fig. 1 Forward Current vs. Forward Voltage

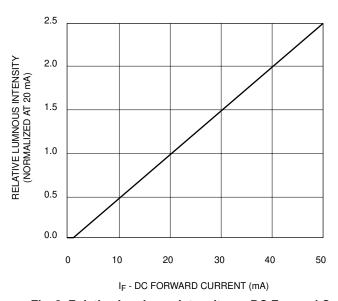


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

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SUPER YELLOW MV8331 MV8332 MV8333 **MV833X**

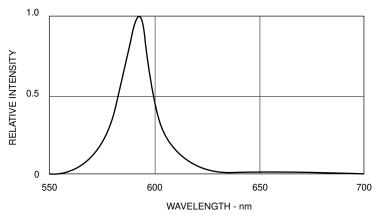
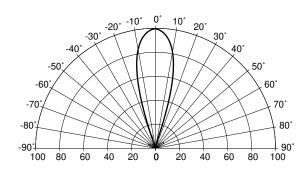


Fig. 3 Relative Intensity vs Peak Wavelength



REL. LUMINOUS INTENSITY (%)

Fig. 4 Radiation Diagram

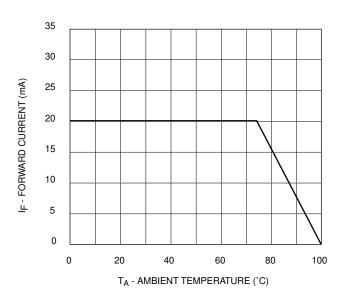


Fig. 5 Current Derating Curve

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