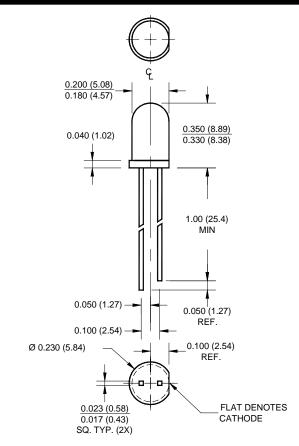


### PACKAGE DIMENSIONS



#### 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
 MV830X

 MV8303
 MV8304

 MV8305
 MV8306

### 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 moderate viewing angle of 20° 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 <sub>A</sub> = 25°C unless otherwise specified)						
Parameter	Symbol	Rating	Unit			
Operating Temperature	T <sub>OPR</sub>	-40 to +100	°C			
Storage Temperature	T <sub>STG</sub>	-40 to +100	°C			
Lead Soldering Time	T <sub>SOL</sub>	260 for 5 sec	°C			
Continuous Forward Current	I <sub>F</sub>	30	mA			
Peak Forward Current		160	mA			
(f = 1.0 KHz, Duty Factor = 1/10)	I IF	100	IIIA			
Reverse Voltage	V <sub>R</sub>	5	V			
Power Dissipation	PD	85	mW			



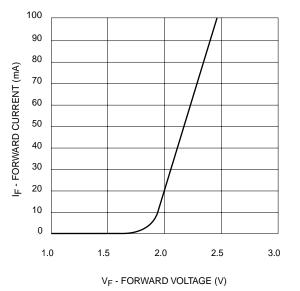
 SUPER YELLOW
 MV830X

 MV8303
 MV8304

 MV8305
 MV8306

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)						
Part Number	MV8303	MV8304	MV8305	MV8306	Condition	
Luminous Intensity (mcd)					I <sub>F</sub> = 20 mA	
Minimum	630	1000	1600	2500		
Typical	940	1500	2400	3500		
Forward Voltage (V)					I <sub>F</sub> = 20 mA	
Maximum	2.8	2.8	2.8	2.8		
Typical	2.1	2.1	2.1	2.1		
Peak Wavelength (nm)	590	590	590	590	I <sub>F</sub> = 20 mA	
Spectral Line Half Width (nm)	15	15	15	15	I <sub>F</sub> = 20 mA	
Viewing Angle (°)	20	20	20	20	I <sub>F</sub> = 20 mA	







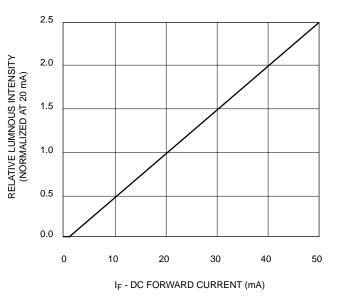


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



SUPER YELLOW	MV830X
MV8303 MV8304	
MV8305 MV8306	

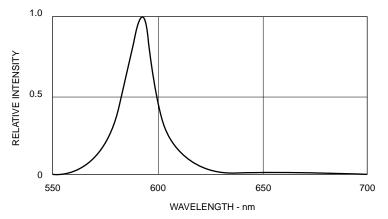


Fig. 3 Relative Intensity vs Peak Wavelength

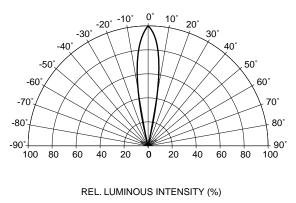
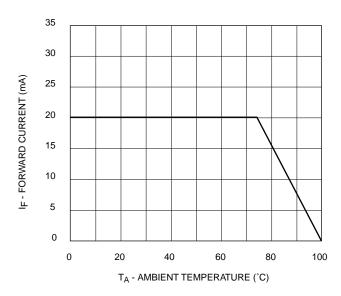


Fig. 4 Radiation Diagram







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- 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.

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