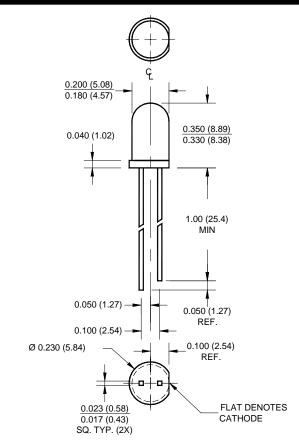


#### PACKAGE DIMENSIONS



#### 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			



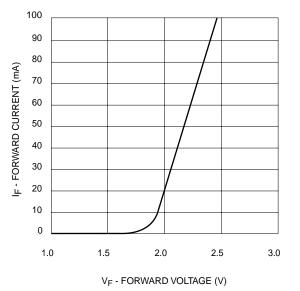
 SUPER YELLOW
 MV830X

 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	







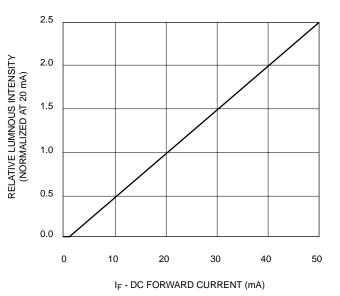


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



SUPER YELLOW	MV830X
MV8303 MV8304	
MV8305 MV8306	

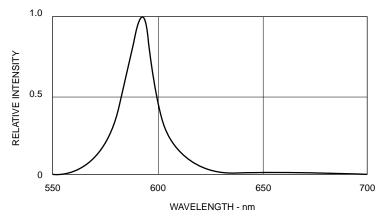


Fig. 3 Relative Intensity vs Peak Wavelength

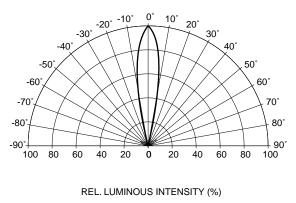
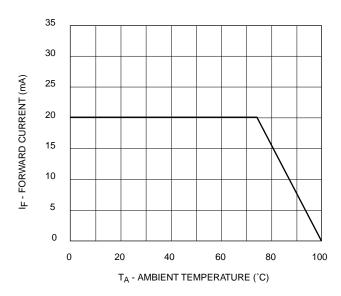


Fig. 4 Radiation Diagram







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