

### PACKAGE DIMENSIONS SUPER ORANGE **MV871X** MV8713 MV8714 0.200 (5.08) MV8715 MV8716 0.180 (4.57) 0.350 (8.89) 0.040 (1.02) 0.330 (8.38) **FEATURES** • Popular T-1 3/4 package · Super high brightness suitable for outdoor 1.00 (25.4) applications MIN · Solid state reliability · Water clear optics · Standard 100 mil. lead spacing 0.023 (0.58) 0.017 (0.43) 0.050 (1.27) SQ. (2X) NOM 0.100 (2.54) NOM FLAT DENOTES CATHODE Ø0.230 (5.84)

### 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 12° for concentrated light output. It is made with an AllnGaP LED that emits orange light at 620 nm. It is encapsulated in a water clear epoxy lens package.

<b>ABSOLUTE MAXIMUM RATINGS</b> (T <sub>A</sub> = 25°C unless otherwise specified)					
Parameter	Symbol	bol 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>	40	mA		
Peak Forward Current	1	160	mA		
(f = 1.0 KHz, Duty Factor = 1/10)	IF	100	IIIA		
Reverse Voltage	V <sub>R</sub>	5	V		
Power Dissipation	PD	100	mW		



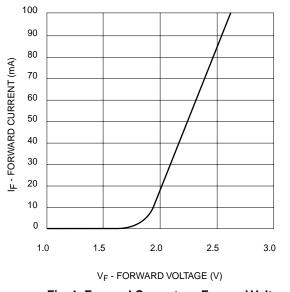
 SUPER ORANGE
 MV871X

 MV8713
 MV8714

 MV8715
 MV8716

Part Number	MV8713	MV8714	MV8715	MV8716	Condition
Luminous Intensity (mcd)					l <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	
Wavelength (nm)					I <sub>F</sub> = 20 mA
Peak	620	620	620	620	
Dominant	615	615	615	615	
Spectral Line Half Width (nm)	20	20	20	20	I <sub>F</sub> = 20 mA
Viewing Angle (°)	12	12	12	12	I <sub>F</sub> = 20 mA

### **TYPICAL PERFORMANCE CURVES**



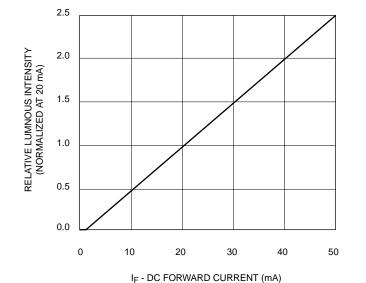


Fig. 1 Forward Current vs. Forward Voltage

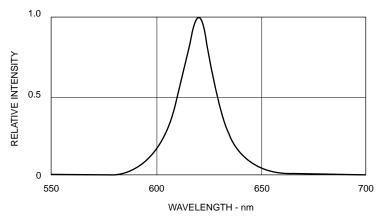
Fig. 2 Relative Luminous Intensity vs. DC Forward Current



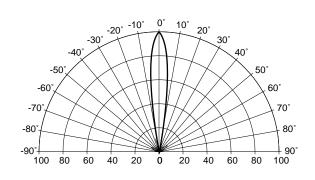
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REL. LUMINOUS INTENSITY (%)



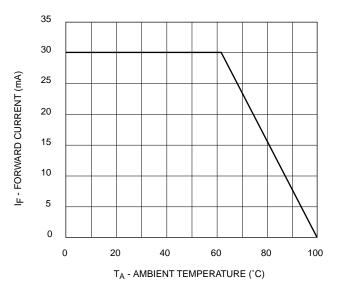


Fig. 5 Current Derating Curve



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