

0.200 (5.08) 0.350 (8.89) 0.330 (8.38) 0.040 (1.02) 1.00 (25.4) MIN 0.050 (1.27) NOM FLAT DENOTES CATHODE

SUPER ORANGE MV8713 MV8714 MV8715 MV8716 MV871X

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 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.

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	40	mA				
Peak Forward Current	1	160	Λ				
(f = 1.0 KHz, Duty Factor = 1/10)	l le	160	mA				
Reverse Voltage	V_R	5	V				
Power Dissipation	P _D	100	mW				



SUPER ORANGE MV8713 MV8714 MV8715 MV8716

MV871X

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)							
Part Number	MV8713	MV8714	MV8715	MV8716	Condition		
Luminous Intensity (mcd)					I _F = 20 mA		
Minimum	630	1000	1600	2500			
Typical	940	1500	2400	3500			
Forward Voltage (V)					I _F = 20 mA		
Maximum	2.8	2.8	2.8	2.8			
Typical	2.1	2.1	2.1	2.1			
Wavelength (nm)					I _F = 20 mA		
Peak	620	620	620	620			
Dominant	615	615	615	615			
Spectral Line Half Width (nm)	20	20	20	20	I _F = 20 mA		
Viewing Angle (°)	12	12	12	12	I _F = 20 mA		

TYPICAL PERFORMANCE CURVES

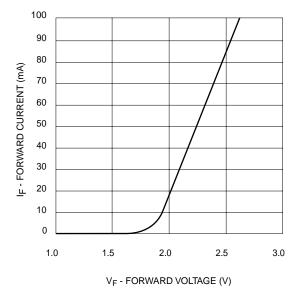


Fig. 1 Forward Current vs. Forward Voltage

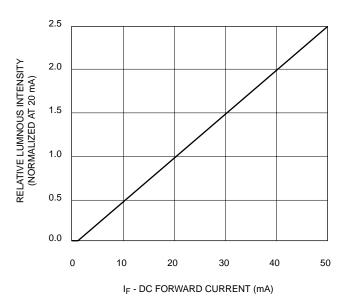
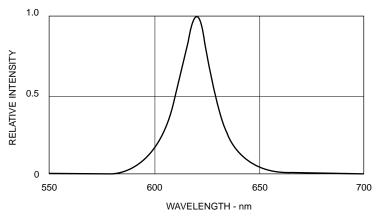


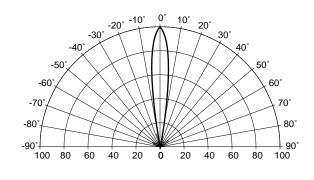
Fig. 2 Relative Luminous Intensity vs. DC Forward Current



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REL. LUMINOUS INTENSITY (%)

Fig. 4 Radiation Diagram

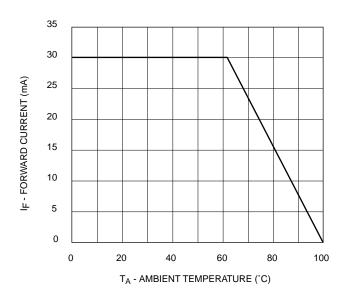


Fig. 5 Current Derating Curve



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- 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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