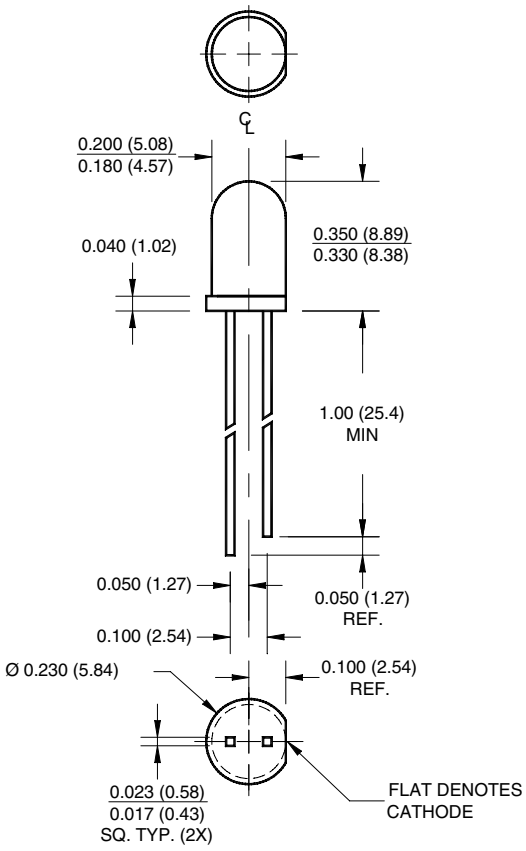
FAIRCHILD
SEMICONDUCTOR®

ULTRA-BRIGHT T-1 3/4 (5 mm)
LED LAMP - Water Clear

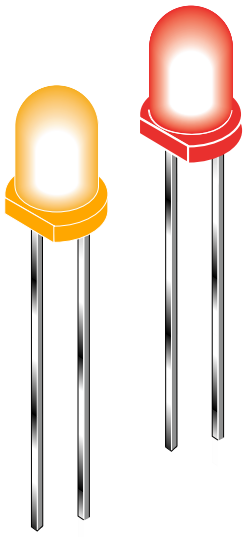
MV8834T RED MV8334T AMBER

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.



APPLICATIONS

- Traffic management (e.g., traffic signals, variable message signs, and etc.)
- Signage (indoor and outdoor)

DESCRIPTION

MV8834T and MV8334T, T-1 3/4 ultra-bright LED lamps that utilize TS-AlInGaP technology, have a moderate viewing angle of 30°. They are encapsulated in a water clear epoxy lens package.

FEATURES

- Popular T-1 3/4 package
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing

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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 +110	°C
Lead Soldering Time	T_{SOL}	260 for 5 sec	°C
Continuous Forward Current	I_F	50	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I_F	100	mA
Reverse Voltage (I_R = 100 µA)	V_R	5	V
Power Dissipation	P_D	100	mW

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	RED MV8834T	AMBER MV8334T	Condition
Luminous Intensity (mcd)			I_F = 20 mA
Minimum	1000	1000	
Typical	2200	2200	
Forward Voltage (V)			I_F = 20 mA
Maximum	2.4	2.4	
Typical	2.0	2.2	
Wavelength (nm)			
Peak	635	594	I_F = 20 mA
Dominant	630	592	
Spectral Line Half Width (nm)	20	20	I_F = 20 mA
Viewing Angle (°)	30	30	I_F = 20 mA

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TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Forward Voltage

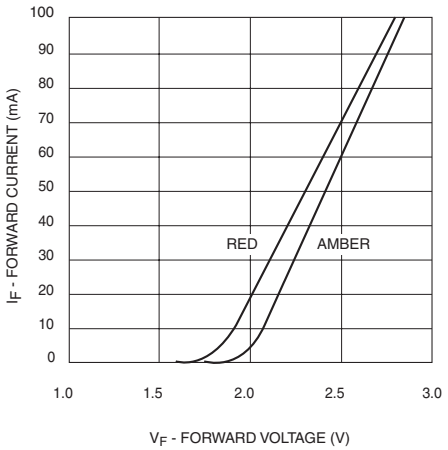


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

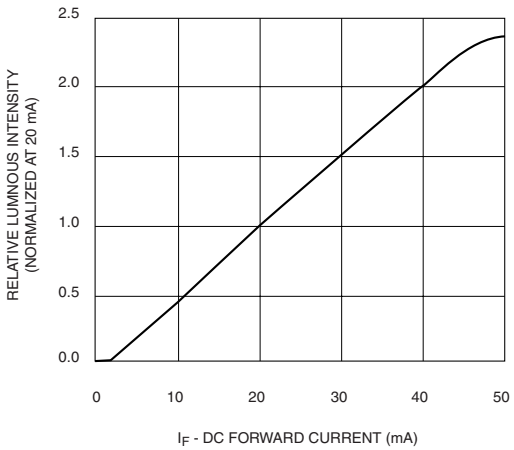


Fig. 3 Relative Intensity vs Peak Wavelength

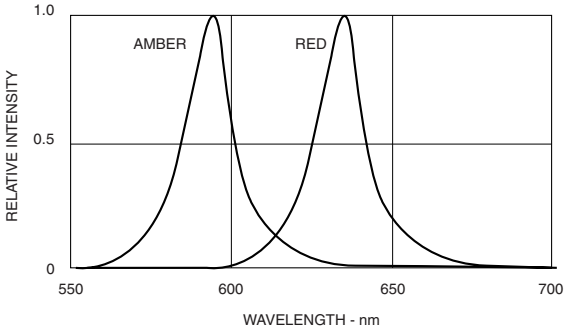


Fig. 4 Radiation Diagram

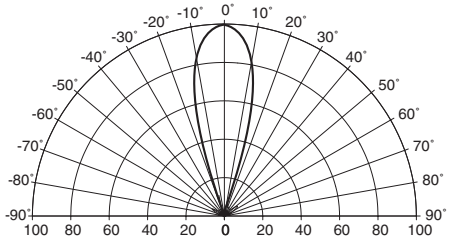
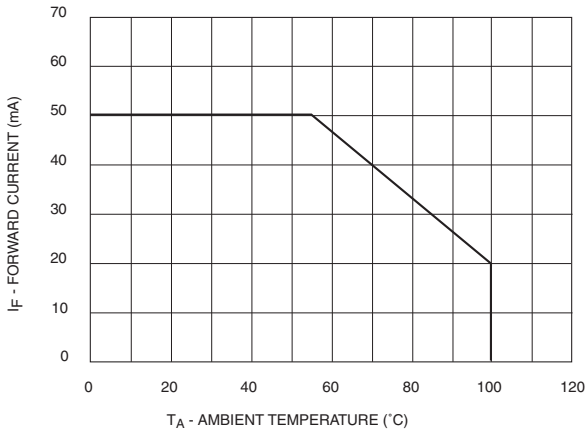


Fig. 5 Current Derating Curve



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