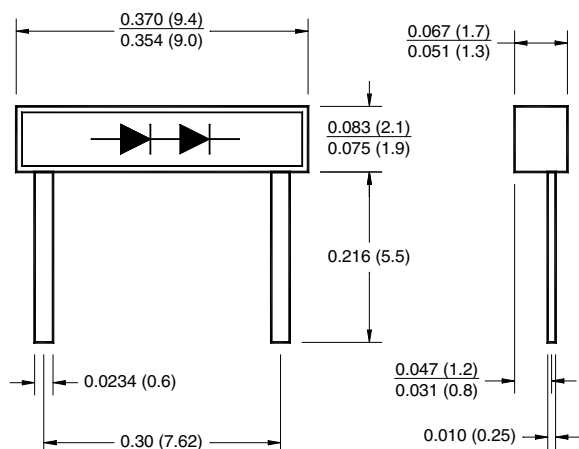


SOLID STATE LED LAMPS

LCD BACKLIGHT ILLUMINATOR

PACKAGE DIMENSIONS



NOTE:

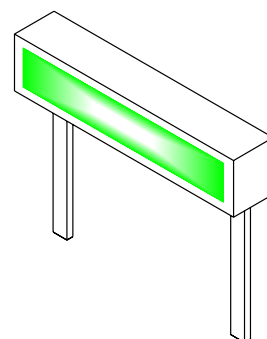
1. Dimensions are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5mm (0.059") max.
4. Tolerance is ± 0.12 " (0.3mm) unless otherwise noted.

YELLOW
GREEN
ORANGE
HER

MV942-3 Clear
MV942-4 Clear
MV942-8 Clear
MV942-9 Clear

FEATURES

- Low power consumption
- Uniform lighting across entire bar



DESCRIPTION

These right angle bar illuminators have two chips connected in series. They are housed in a 2mm x 9mm white rectangular molded reflector case with a clear epoxy lens.

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	YELLOW MV942-3	GREEN MV942-4	ORANGE MV942-8	HER MV942-9	Units
Continuous Forward Current - I_F	20	30	30	30	mA
Peak Forward Current - I_F ($f = 1.0 \text{ KHz}$, Duty Factor = 1/10)	160	160	160	160	mA
Reverse Voltage - V_R ($I_R = 10 \mu\text{A}$)	5	5	5	5	V
Power Dissipation - P_D	85	100	100	100	mW
Operating Temperature - T_{OPR}	-40 to +85				$^\circ\text{C}$
Storage Temperature - T_{STG}	-40 to +100				$^\circ\text{C}$
Lead Soldering Time - T_{SOL}					$^\circ\text{C}$
Wave	260 for 5 sec				
Reflow	240 for 5 sec				

YELLOW
GREEN
ORANGE
HER

MV942-3 Clear
MV942-4 Clear
MV942-8 Clear
MV942- 9 Clear

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Part Number	YELLOW MV942-3	GREEN MV942-4	ORANGE MV942-8	HER MV942-9	Condition
Luminous Intensity (mcd)					I _F = 20mA
Minimum	30	30	30	35	
Typical	45	45	45	45	
Forward Voltage (V)					I _F = 20mA
Maximum	5.6	5.6	5.6	5.6	
Typical	4.2	4.2	4.2	4.2	
Peak Wavelength (nm)	585	565	610	635	I _F = 20mA
Spectral Line Half Width (nm)	35	30	35	45	I _F = 20mA
Viewing Angle (°)	160	160	160	160	I _F = 20mA

TYPICAL PERFORMANCE CURVES

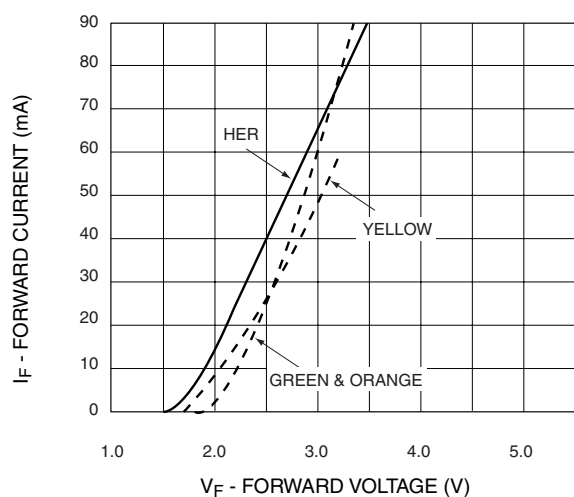


Fig. 1 Forward Current vs. Forward Voltage

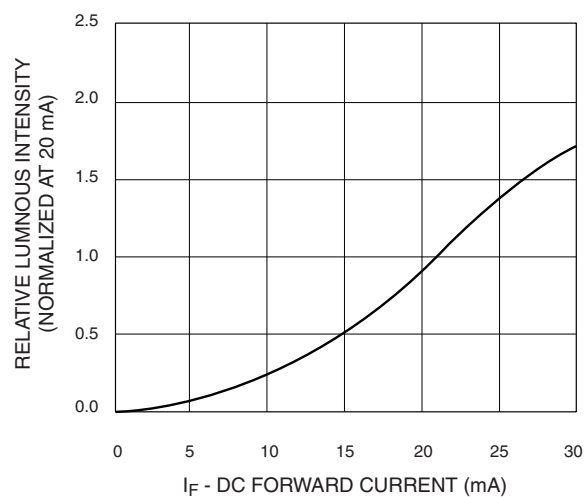


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

YELLOW
GREEN
ORANGE
HER

MV942-3 Clear
MV942-4 Clear
MV942-8 Clear
MV942-9 Clear

TYPICAL PERFORMANCE CURVES

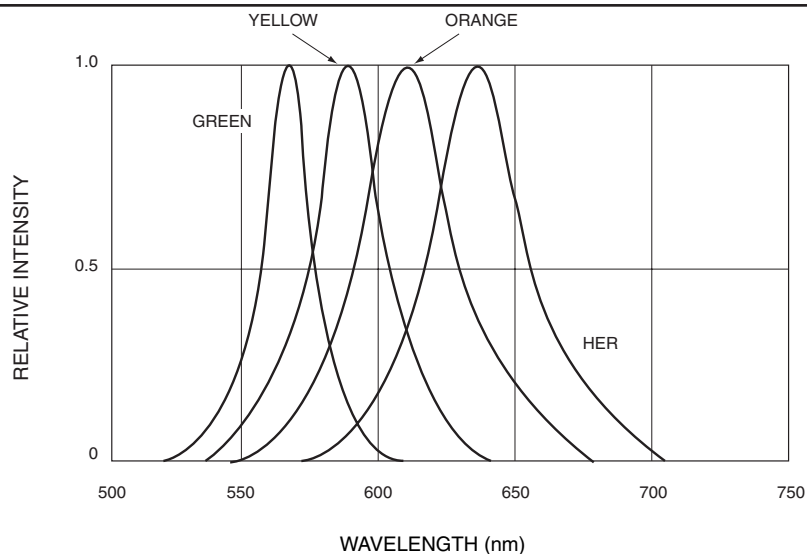


Fig. 3 Relative Intensity vs. Peak Wavelength

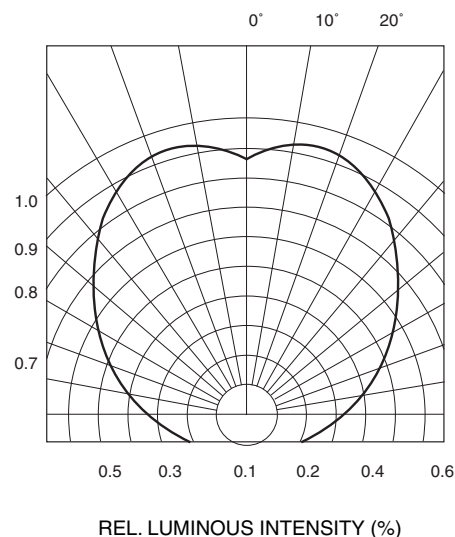


Fig. 4 Radiation Diagram

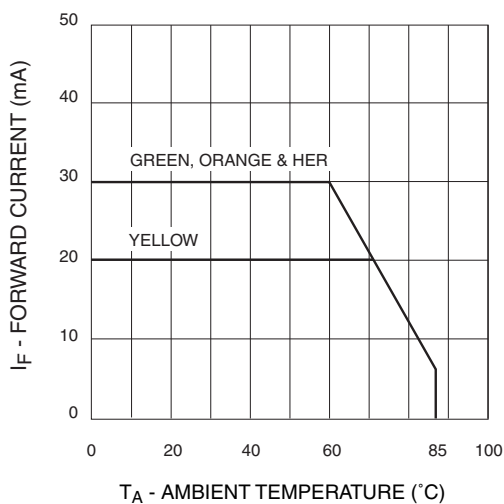


Fig. 5 Current Derating Curve

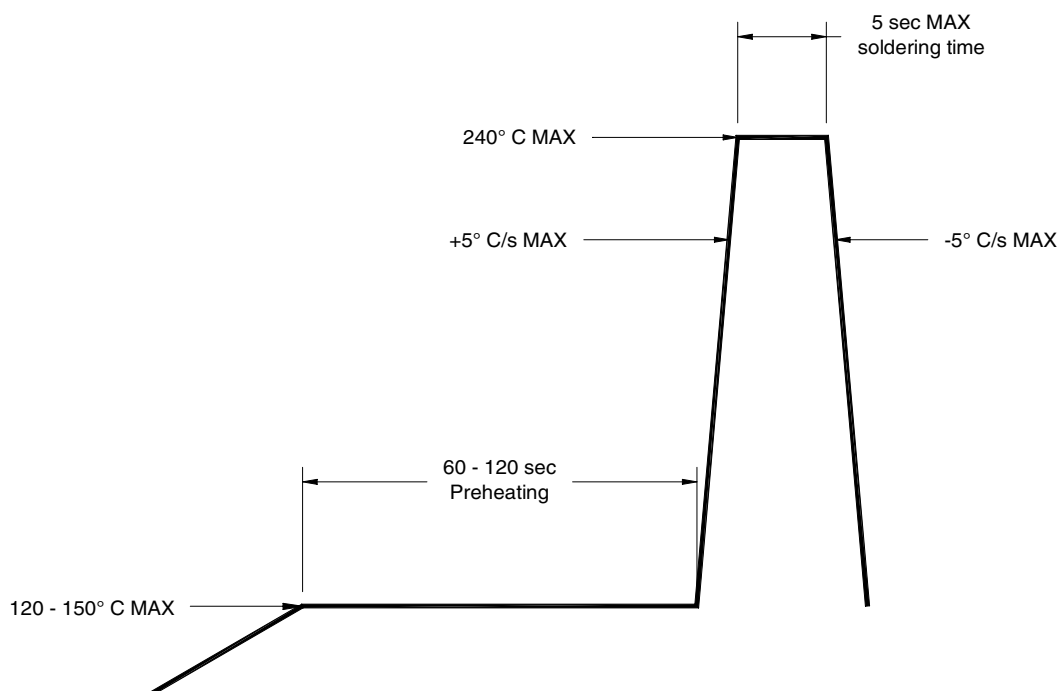
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RECOMMENDED IR REFLOW SOLDERING PROFILE



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