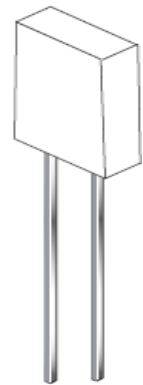
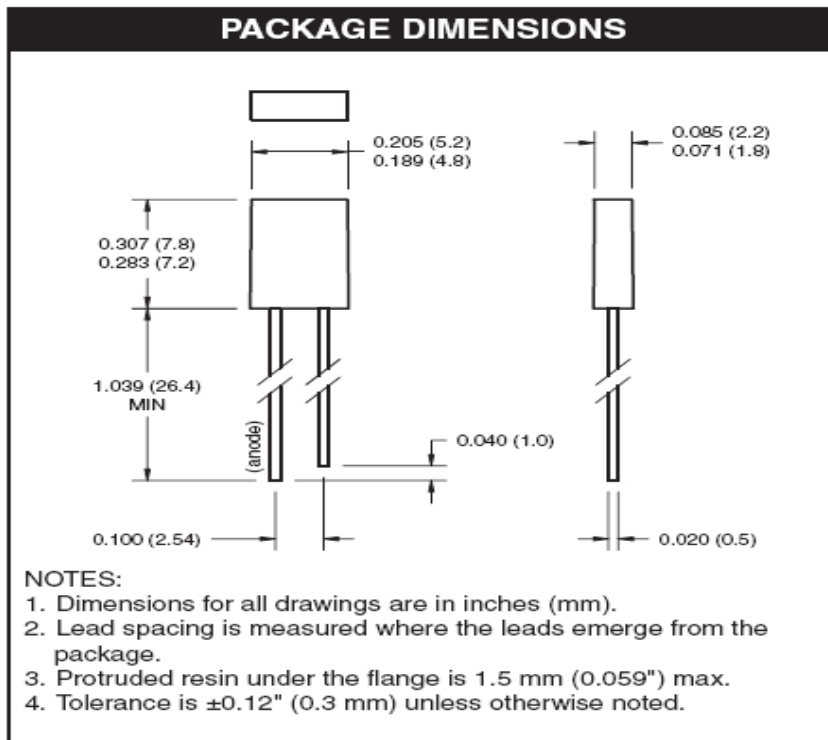




# SOLID STATE LED LAMP

## RECTANGULAR 2 X 5 mm LED LAMPS

MV52123	AlGaAs	Red	MV53123	Yellow	MV54123	Green
MV57123	HER		MV5B123	Blue		



## DESCRIPTION

This rectangular LED lamp provides a lighted surface area of 2 X 5 mm. The high efficiency red and yellow solid state lamps contain a GaAsP on GaP light emitting diode. The green lamps utilize a GaP light emitting diode. The blue lamps have a GaN/SiC chip.

## FEATURES

- General purpose indicator
- Selected minimum intensities
- Color diffused lens
- Standard 100 mil. lead spacing
- Long life solid-state reliability



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## RECTANGULAR 2 X 5 mm LED LAMPS

MV52123	AlGaAs	Red	MV53123	Yellow	MV54123	Green
MV57123	HER		MV5B123	Blue		

ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> = 25° C unless otherwise specified)						
Parameter	BLUE MV5B123	HER MV57123	GREEN MV54123	YELLOW MV53123	AlGaAs RED MV52123	Units
Continuous Forward Current - I <sub>F</sub>	30	30	30	25	30	mA
Peak Forward Current - I <sub>F</sub> (f = 1.0 KHz, Duty Factor = 1/10)	100	150	150	150	150	mA
Reverse Voltage - V <sub>R</sub> (I <sub>R</sub> = 10 μA)	10	5	5	5	5	V
Power Dissipation - P <sub>D</sub>	115	100	100	100	100	mW
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

ELECTRICAL / OPTICAL CHARACTERISTICS (T <sub>A</sub> = 25° C)						
Part Number	MV5B123 BLUE	MV57123 HER	MV54123 GREEN	MV53123 YELLOW	MV52123 AlGaAs RED	Condition
Luminous Intensity (mcd)						
Minimum	2.0	1.0	1.0	1.0	1.5	I <sub>F</sub> = 20mA
Typical	6.0	4.0	4.0	4.0	5.0	
Forward Voltage (V) Maximum	4.5	3.0	3.0	3.0	2.4	I <sub>F</sub> = 20mA
Typical	3.8	2.0	2.2	2.1	1.7	
Peak Wavelength (nm)	430	635	565	585	660	I <sub>F</sub> = 20mA
Spectral Line Half Width (nm)	65	35	30	45	40	I <sub>F</sub> = 20mA
Viewing Angle (°)	100	100	100	100	100	I <sub>F</sub> = 20mA



# SOLID STATE LED LAMP

## RECTANGULAR 2 X 5 mm LED LAMPS

MV52123 AlGaAs Red

MV53123 Yellow

MV54123 Green

MV57123 HER

MV5B123 Blue

### TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Forward Voltage

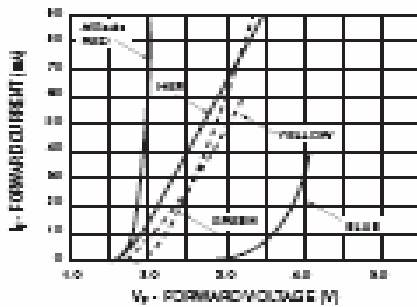


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

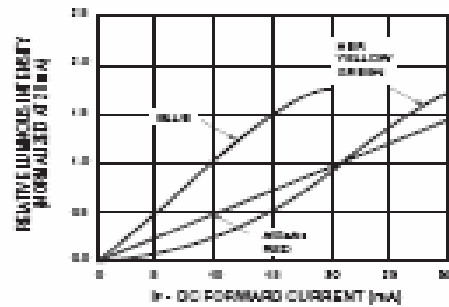


Fig. 3a Relative Intensity vs. Peak Wavelength

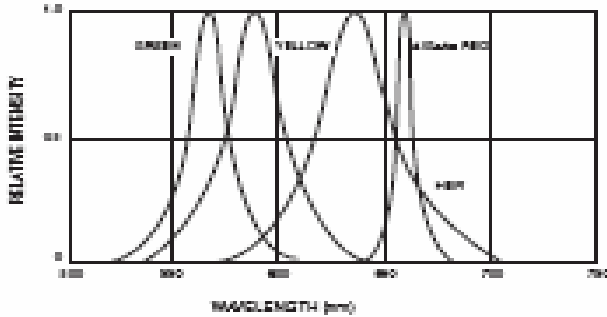


Fig. 4 Current Derating Curve

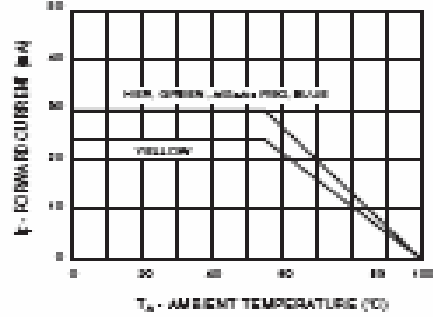
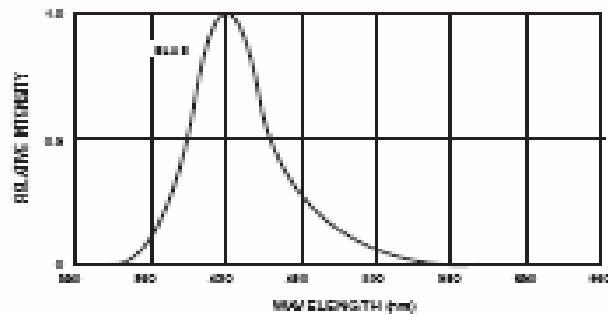


Fig. 3b Relative Intensity vs. Peak Wavelength





## SOLID STATE LED LAMP RECTANGULAR 2 X 5 mm LED LAMPS

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MV52123	AlGaAs	Red	MV53123	Yellow	MV54123	Green
MV57123	HER		MV5B123	Blue		

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2. A critical component in any component of a life support or device or system whose failure to perform can be reasonably expected to cause the failure of the life for use device or system, or to affect its safety or effectiveness.

