



LOW PROFILE T-1 SOLID STATE LAMPS

ABSOLUTE MAXIMUM RATING (T_A = 25°C Unless Otherwise Specified)

Parameter	Symbol	Rating	Units
Power Dissipation	P _D	105	mW
Derate linearly from 25°C		-1.14	mW/°C
Continuous Forward Current (MV6377C)	I _F	35	mA
Peak Forward Current - (µsec pulse 0.3% duty cycle) (MV6477C=60 mA) (MV6377C=60 mA)	I _{FM}	35	mA
Reverse Voltage (I _R = 100 µA)	V _R	5	V
Lead Soldering Time at 260°C (See Note 1)	T _{sold}	5	sec
Operating Temperature	T _{ops}	-55 to +100	°C
Storage Temperature	T _{stg}	-55 to +100	°C

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Part Number	Symbol	MV6077C	MV6377C	MV6477C	MV6777C	Condition
Luminous Intensity (mcd)	I _v	0.3	1.0	1.0	1.0	I _F = 20mA
Minimum						
Typical		1.8	7.0	7.0	7.0	
Forward Voltage (V)	V _F	1.6	2.1	2.2	2.0	I _F = 20mA
Typical						
Maximum		2.0	3.0	3.0	3.0	
Spectral Line Half Width (nm)		30	35	35	45	I _F = 20mA
Peak Wavelength (nm)	λ _p	660	685	665	635	I _F = 20mA
Viewing Angle (Total) (°)	2θ 1/2	140	140	140	140	I _F = 20mA

1. The leads of the device were immersed in molten solder at 260°C, to a point 1/16 inch (1.6 mm) from the body of the device per MIL-8-750, with a dwell time of 5 seconds.



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TYPICAL PERFORMANCE CURVES (T_A = 25°C)

Fig. 1 Forward Current vs. Forward Voltage

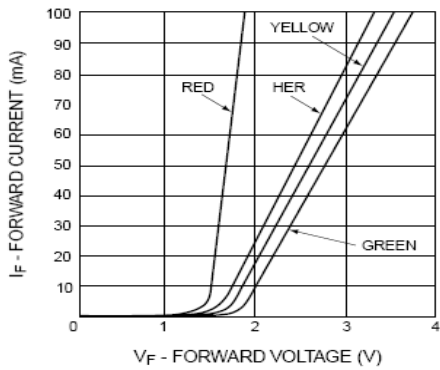


Fig. 2 Luminous Intensity vs. Forward Current

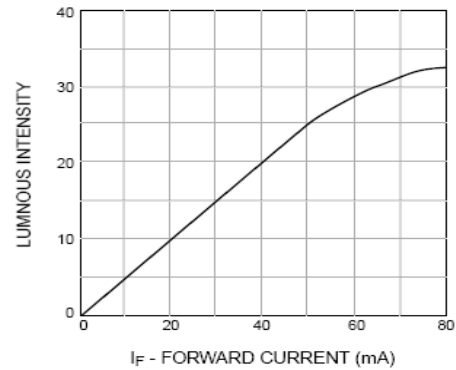


Fig. 3 Spatial Distribution

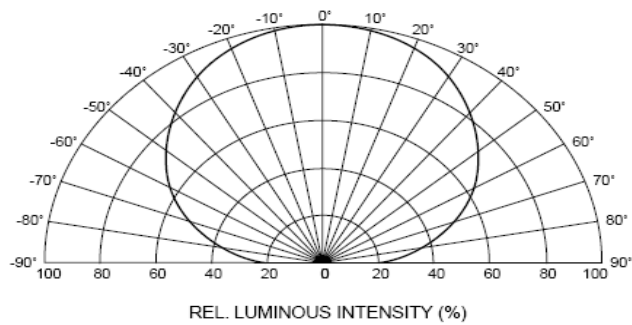
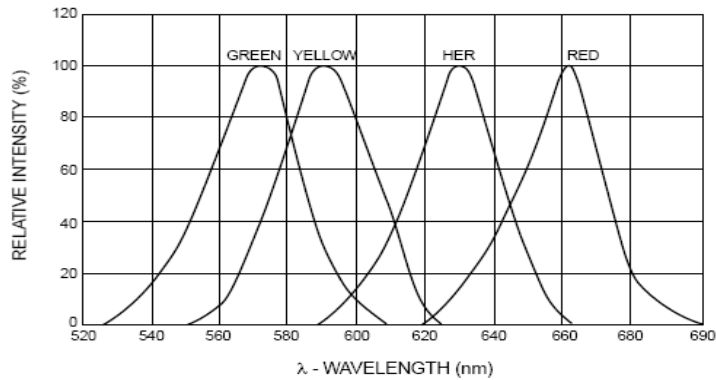


Fig. 4 Relative Intensity vs. Peak Wavelength





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