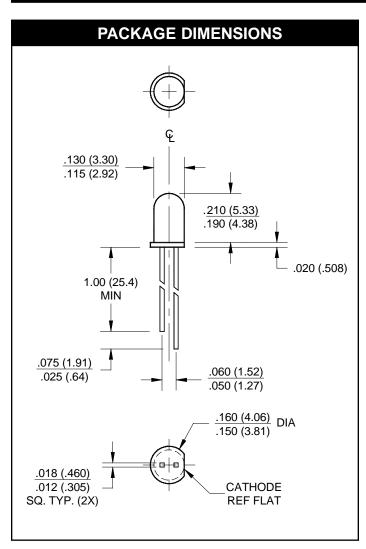


T-1 SOLID STATE LAMPS

RED DIFFUSED YELLOW DIFFUSED HER DIFFUSED MV5074C MV5374C MV5774C RED DIFFUSED
GREEN DIFFUSED

MV5075C MV5474C



FEATURES

- Copper leads
- Solid-state reliability

DESCRIPTION

These solid state indicators offer a variety of color selection. The High Efficiency Red, Green and Yellow devices are made with a gallium arsenide phosphide LED on gallium phosphide substrate. All are encapsulated in province the second part of the second par



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Parameter	Symbol	Rating	Units	
Power Dissipation	D	105	mW	
Derate linearly from 25°C	P_{D}	-1.14	mW/°C	
Continuous Forward Current (MV5374C=20 mA)	I _F	35	mA	
Peak Forward Current - (μsec pulse 0.3% duty cycle)	I _{FM}	35	mA	
(MV5474C=90 mA) (MV5374C=60 mA)	·FIVI			
Reverse Voltage ($I_R = 100 \mu A$)	V_{R}	5	V	
Lead Soldering Time at 260°C (See Note 1)	T _{SOL}	5	sec	
Operating Temperature	T _{OPR}	-55 to +100	°C	
Storage Temperature	T _{STG}	-55 to +100	°C	

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)										
Part Number	Symbol	MV5074C	MV5075C	MV5374C	MV5474C	MV5774C	Condition			
Luminous Intensity (mcd)							I _F = 20mA			
Minimum	I _V	0.7	0.6	1.5	1.2	1.5				
Typical		2.5	1.5	9.0	9.0	9.0				
Forward Voltage (V)							I _F = 20mA			
Typical	V _F	1.6	1.6	2.1	2.2	2.0				
Maximum		2.0	2.0	3.0	3.0	3.0				
Spectral Line Half Width (nm)		20	20	35	35	45	I _F = 20mA			
Peak Wavelength (nm)	λρ	660	660	585	565	635	IF = 20mA			
Reverse Current (μA)							V _R = 5.0V			
Maximum		100	100	100	100	100				
Viewing Angle (Total) (°)	2θ 1/2	70	90	90	90	90	See Fig. 3			

^{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-S-750, with a dwell time of 5 seconds.



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TYPICAL PERFORMANCE CURVES (TA =25°C)

Fig. 1 Forward Current vs. Forward Voltage

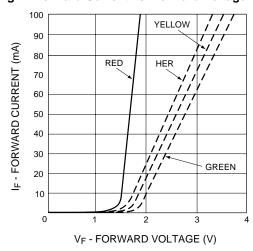


Fig. 2 Luminous Intensity vs. Forward Current

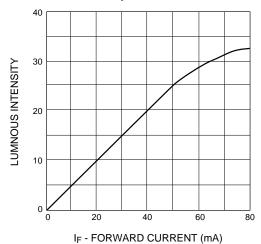


Fig. 3 Spatial Distribution

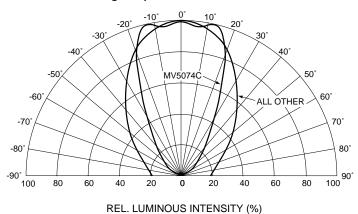
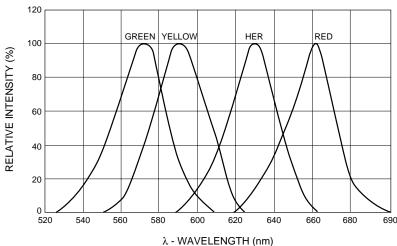


Fig. 4 Relative Intensity vs. Peak Wavelength





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- 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.