

SEMICONDUCTOR®

RED DIFFUSED

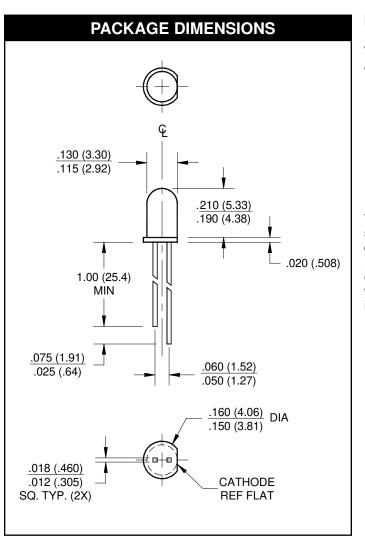
HER DIFFUSED

YELLOW DIFFUSED

T-1 SOLID STATE LAMPS

RED DIFFUSED GREEN DIFFUSED

MV5075C MV5474C



MV5074C

MV5374C

MV5774C

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 epoxy packages. Their small size (approximately T-1 size), good viewing angle, and small square leads contribute to their versatility as all purpose indicators.

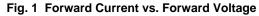
Parameter	Symbol	Rating	Units
Power Dissipation	P	105	mW
Derate linearly from 25°C	PD	-1.14	mW/°C
Continuous Forward Current (MV5374C=20 mA)	l _F	35	mA
Peak Forward Current - (μsec pulse 0.3% duty cycle) (MV5474C=90 mA) (MV5374C=60 mA)	I _{FM}	35	mA
Reverse Voltage ($I_R = 100 \ \mu A$)	V _R	5	V
Lead 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

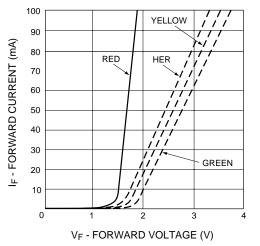
ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)									
Part Number	Symbol	MV5074C	MV5075C	MV5374C	MV5474C	MV5774C	Condition		
Luminous Intensity (mcd)							$I_F = 20 \text{mA}$		
Minimum	Iv	0.7	0.6	1.5	1.2	1.5			
Typical		2.5	1.5	9.0	9.0	9.0			
Forward Voltage (V)							$I_F = 20 \text{mA}$		
Typical	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	$I_F = 20 mA$		
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) (°)	20 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.



TYPICAL PERFORMANCE CURVES (TA =25°C)





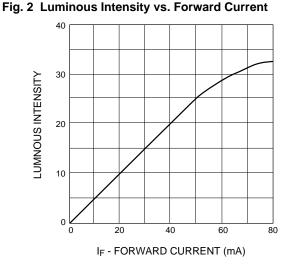
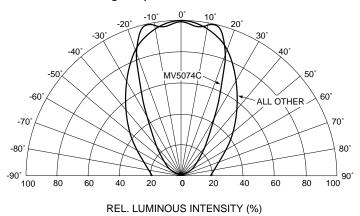
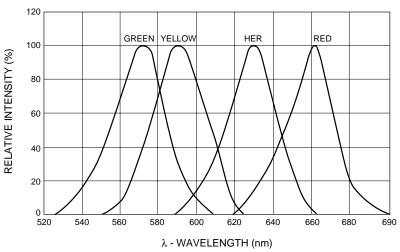


Fig. 3 Spatial Distribution









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