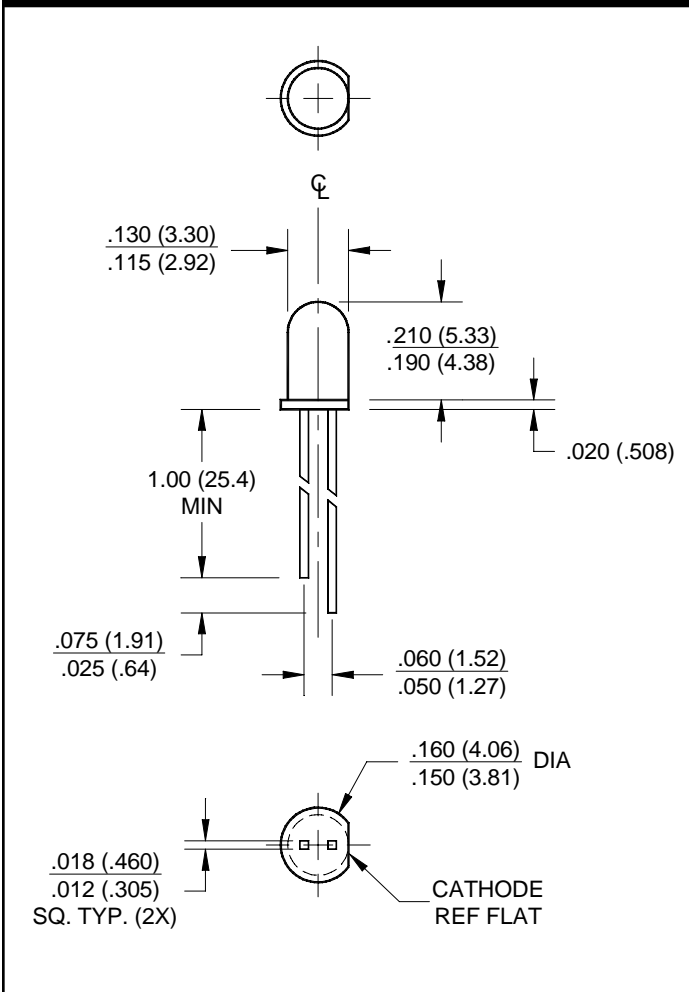


RED DIFFUSED            MV5074C  
YELLOW DIFFUSED      MV5374C  
HER DIFFUSED          MV5774C

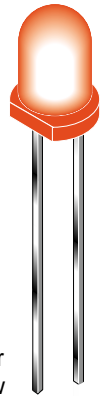
RED DIFFUSED            MV5075C  
GREEN DIFFUSED        MV5474C

**PACKAGE DIMENSIONS**



**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.

**ABSOLUTE MAXIMUM RATING** ( $T_A = 25^\circ\text{C}$  Unless Otherwise Specified)

Parameter	Symbol	Rating	Units
Power Dissipation Derate linearly from 25°C	$P_D$	105 -1.14	mW mW/°C
Continuous Forward Current (MV5374C=20 mA)	$I_F$	35	mA
Peak Forward Current - ( $\mu\text{sec}$ pulse 0.3% duty cycle) (MV5474C=90 mA) (MV5374C=60 mA)	$I_{FM}$	35	mA
Reverse Voltage ( $I_R = 100 \mu\text{A}$ )	$V_R$	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

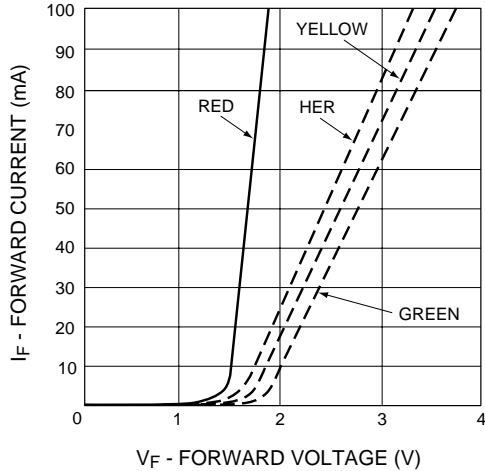
**ELECTRICAL / OPTICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$ )

Part Number	Symbol	MV5074C	MV5075C	MV5374C	MV5474C	MV5774C	Condition
Luminous Intensity (mcd) Minimum Typical	$I_V$	0.7 2.5	0.6 1.5	1.5 9.0	1.2 9.0	1.5 9.0	$I_F = 20\text{mA}$
Forward Voltage (V) Typical Maximum	$V_F$	1.6 2.0	1.6 2.0	2.1 3.0	2.2 3.0	2.0 3.0	$I_F = 20\text{mA}$
Spectral Line Half Width (nm)		20	20	35	35	45	$I_F = 20\text{mA}$
Peak Wavelength (nm)	$\lambda_p$	660	660	585	565	635	$I_F = 20\text{mA}$
Reverse Current ( $\mu\text{A}$ ) Maximum		100	100	100	100	100	$V_R = 5.0\text{V}$
Viewing Angle (Total) (°)	$2\theta$ 1/2	70	90	90	90	90	See Fig. 3

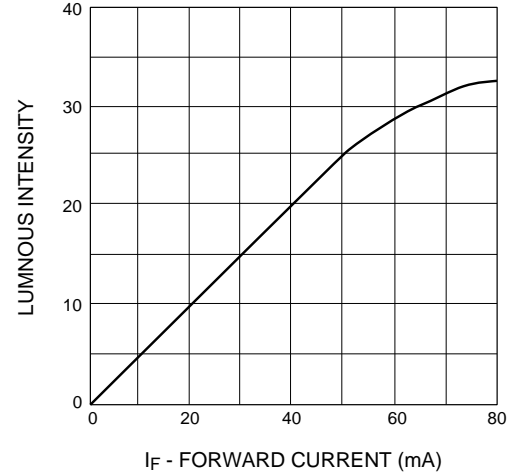
1. The leads of the device were immersed in molten solder at 260°C, to a point 1/16 inch (1.6 mm) from the body of the device per MIL-S-750, with a dwell time of 5 seconds.

**TYPICAL PERFORMANCE CURVES** ( $T_A = 25^\circ\text{C}$ )

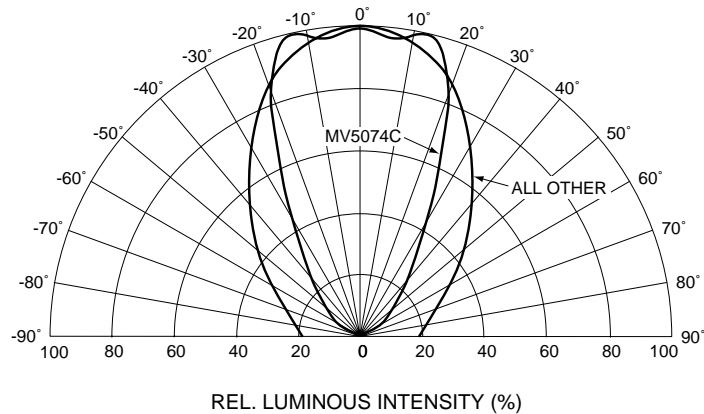
**Fig. 1 Forward Current vs. Forward Voltage**



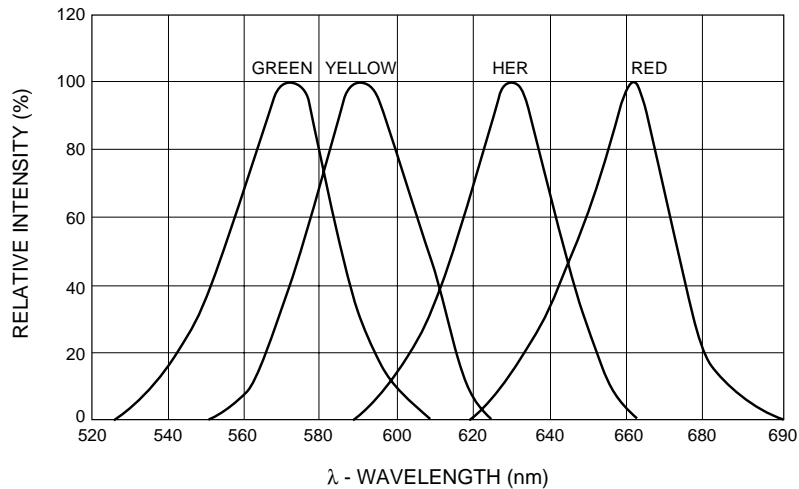
**Fig. 2 Luminous Intensity vs. Forward Current**



**Fig. 3 Spatial Distribution**



**Fig. 4 Relative Intensity vs. Peak Wavelength**



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2. 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.