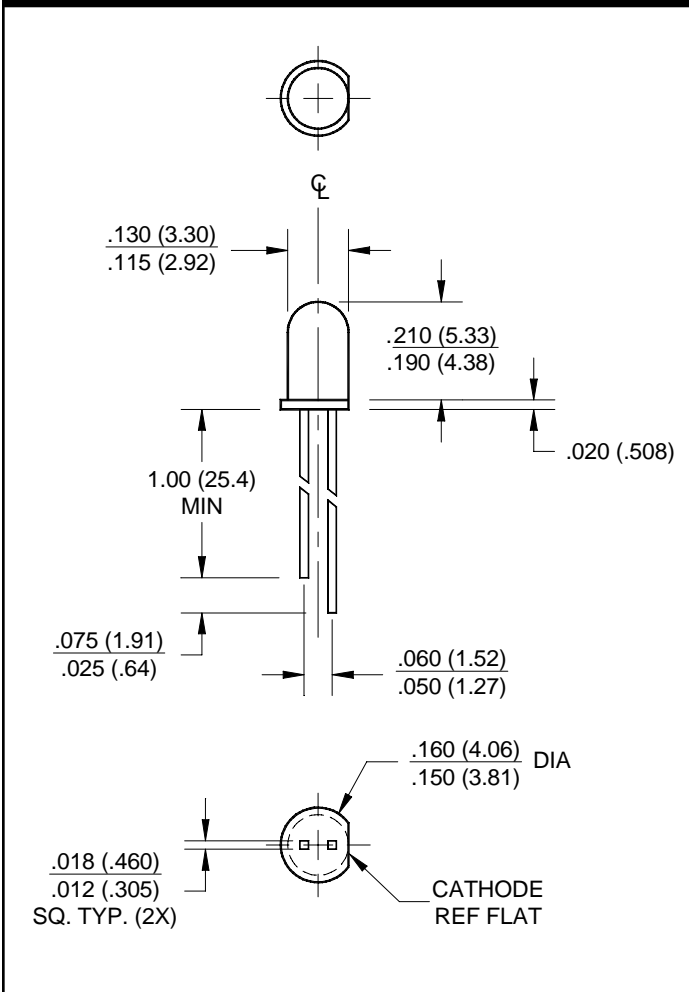


RED DIFFUSED MV5074C
YELLOW DIFFUSED MV5374C
HER DIFFUSED MV5774C

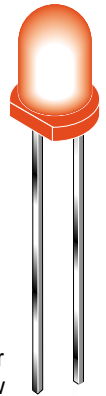
RED DIFFUSED MV5075C
GREEN DIFFUSED MV5474C

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 - (μsec 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)	λ_p	660	660	585	565	635	$I_F = 20\text{mA}$
Reverse Current (μA) Maximum		100	100	100	100	100	$V_R = 5.0\text{V}$
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.

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

Fig. 1 Forward Current vs. Forward Voltage

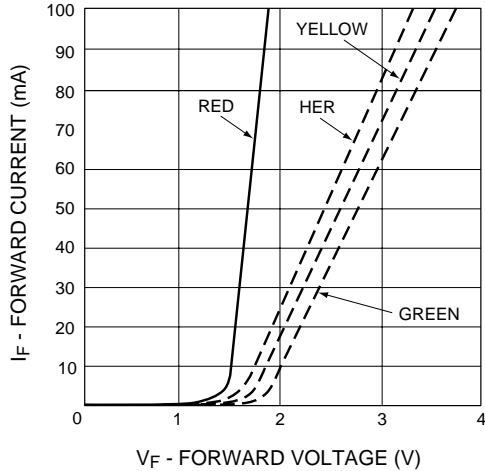


Fig. 2 Luminous Intensity vs. Forward Current

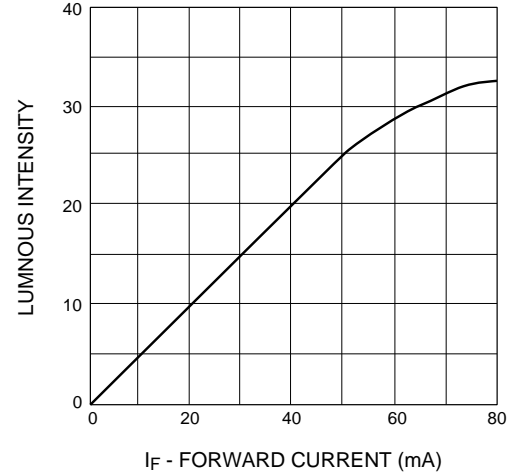


Fig. 3 Spatial Distribution

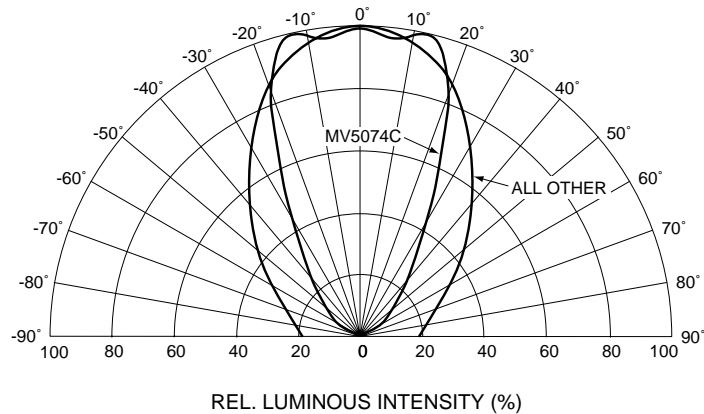
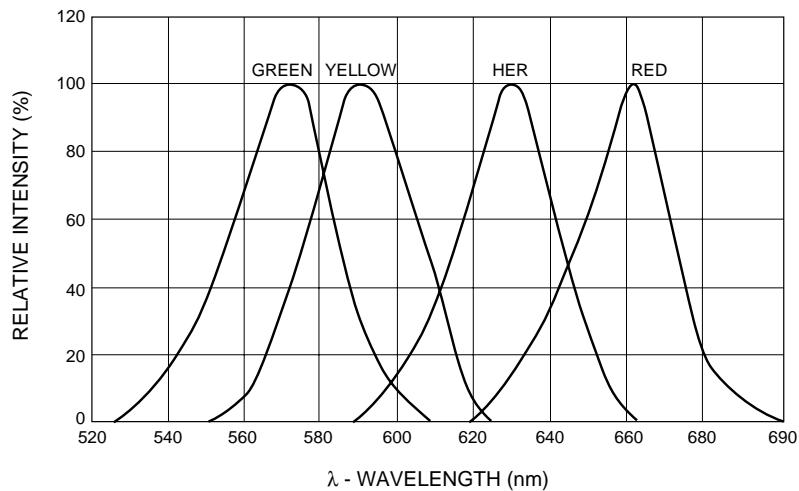


Fig. 4 Relative Intensity vs. Peak Wavelength



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