



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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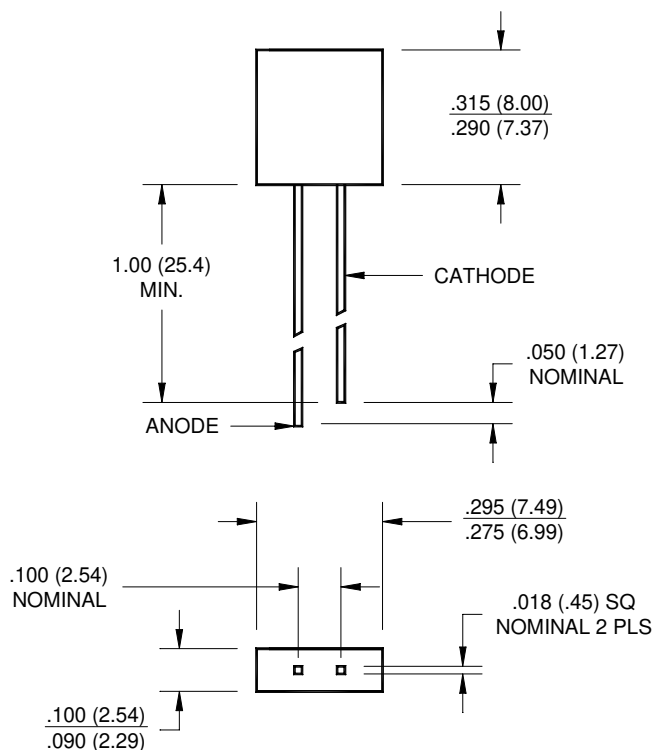
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HIGH EFFICIENCY RED HLMP- 0300/1  
YELLOW HLMP- 0400/1  
HIGH EFFICIENCY GREEN HLMP- 0503/4

## PACKAGE DIMENSIONS

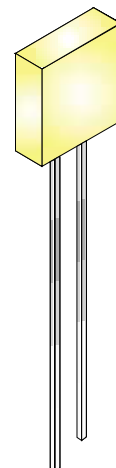


### NOTES:

1. ALL DIMENSIONS ARE IN INCHES (mm).
2. TOLERANCES ARE  $\pm 0.010$ " INCH UNLESS SPECIFIED.
3. AN EPOXY MENISCUS MAY EXTEND ABOUT 0.040" (1mm) DOWN THE LEADS.

## FEATURES

- Wide viewing angle
- Solid state reliability
- Perfect for panel indicators



## DESCRIPTION

The HLMP-0X0X series of rectangular lamps are direct replacements for Agilent's series with the same part numbers. The series is similar to MV5X123 except for the larger lens size. Like the MV5X123, the HLMP-0X0X is stackable. The lamps are tinted and diffused.

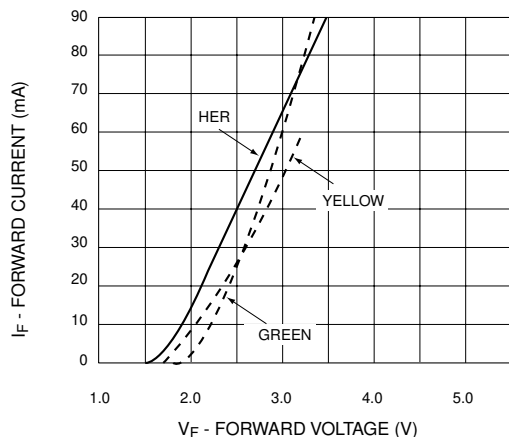
## ABSOLUTE MAXIMUM RATING ( $T_A = 25^\circ\text{C}$ )

| Parameter   | HER         | YELLOW      | HEG         | UNITS |
|---|-------------|-------------|-------------|-------|
| Power Dissipation (HLMP-040X=85mA)                | 135         | 135         | 135         | mW    |
| Peak Forward Current (1 $\mu$ sec pluse, 0.3% DC) | 90          | 90          | 60          | mA    |
| Continuous DC Forward Current                     | 30          | 20          | 30          | mA    |
| Lead Soldering Time at 260° C                     | 5           | 5           | 5           | sec   |
| Operating Temperature                             | -55 to +100 | -55 to +100 | -50 to +100 | °C    |
| Storage Temperature                               | -55 to +100 | -55 to +100 | -50 to +100 | °C    |

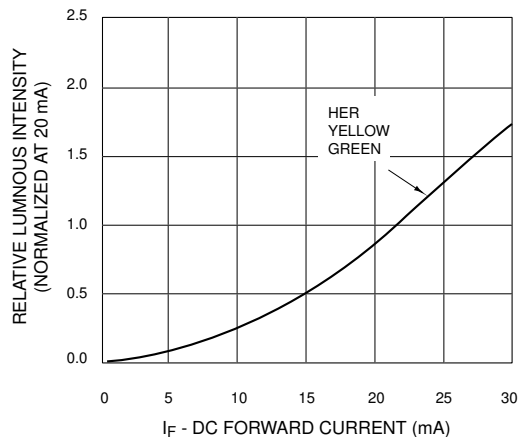
## ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> = 25°C)

| Parameter                     | HER          |     | YELLOW       |     | HEG          |     | Condition              |
|-------------------------------|--------------|-----|--------------|-----|--------------|-----|------------------------|
|                               | HLMP- 0300/1 |     | HLMP- 0400/1 |     | HLMP- 0503/4 |     |                        |
| Luminous Intensity (mcd)      |              |     |              |     |              |     | I <sub>F</sub> = 20mA  |
| Minimum                       | 1.0          | 2.5 | 1.5          | 3.0 | 1.5          | 2.5 |                        |
| Typical                       | 2.5          | 5.0 | 2.5          | 5.0 | 3.0          | 5.0 |                        |
| Forward Voltage (V)           |              |     |              |     |              |     | I <sub>F</sub> = 20mA  |
| Maximum                       | 3.0          | 3.0 | 3.0          | 3.0 | 3.0          | 3.0 |                        |
| Typical                       | 2.1          | 2.1 | 2.2          | 2.2 | 2.3          | 2.3 |                        |
| Peak Wavelength (nm)          | 635          | 635 | 585          | 585 | 565          | 565 | I <sub>F</sub> = 20mA  |
| Spectral Line Half Width (nm) | 45           | 45  | 35           | 35  | 35           | 35  | I <sub>F</sub> = 20mA  |
| Reverse Voltage (V)           | 5            | 5   | 5            | 5   | 5            | 5   | I <sub>R</sub> = 100μA |
| Viewing Angle (°)             | 100          | 100 | 100          | 100 | 100          | 100 |                        |

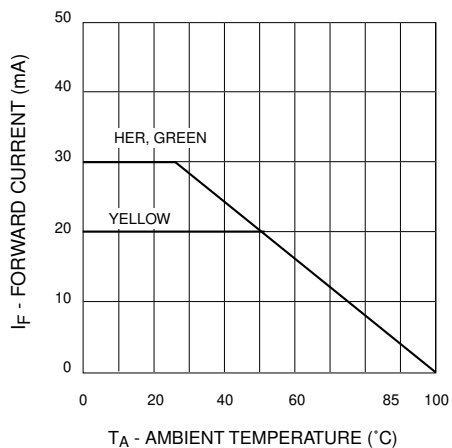
## TYPICAL PERFORMANCE CURVES ( $T_A = 25^\circ\text{C}$ )



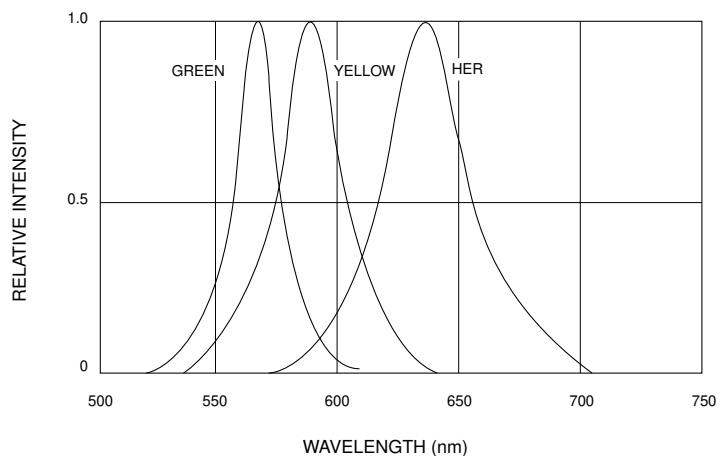
**Fig. 1 Forward Current vs. Forward Voltage**



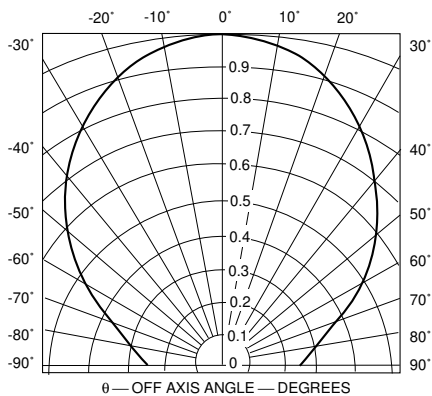
**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**



**Fig. 3 Current Derating Curve**



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



**Fig. 5 Spatial Distribution**

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