

T-1 3/4 (5mm)

HLMP-D101A

Red Diffused

HLMP-D105A

Red Clear with Standoff

T-100 (3mm)

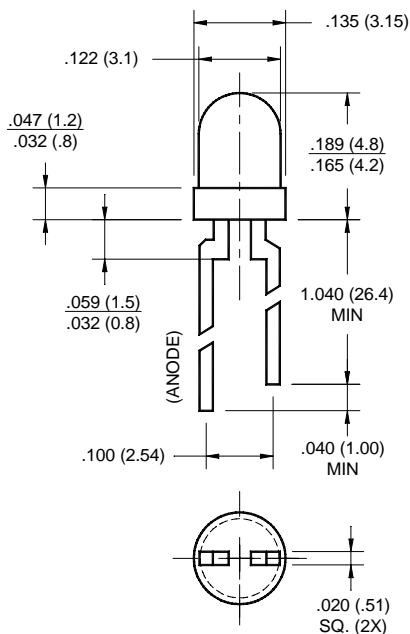
HLMP-K101

Red Diffused

HLMP-K105

Red Clear

PACKAGE DIMENSIONS



FEATURES

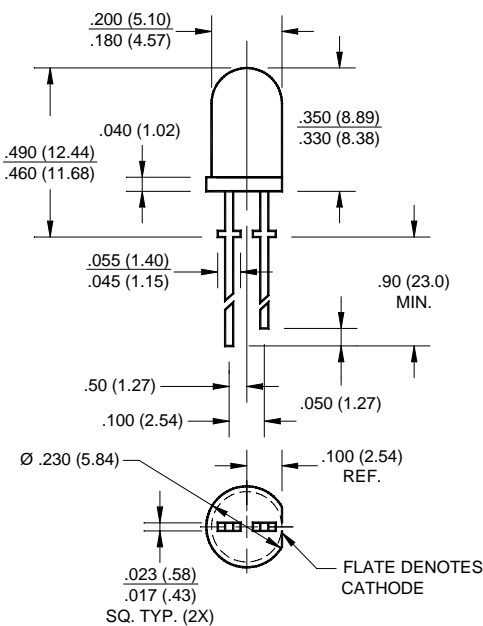
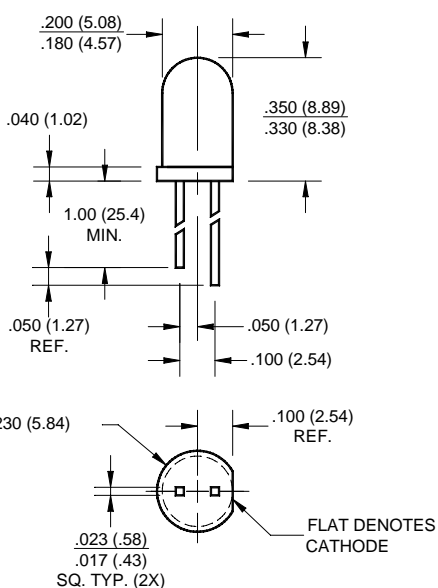
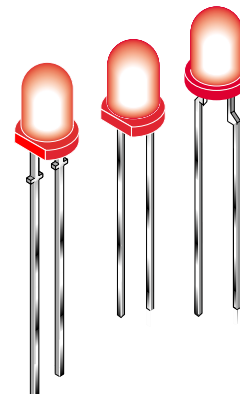
- Wide Viewing Angle
- Deep Red Color

DESCRIPTION

Exceptional light output typifies these devices and provides for their use over a broad range of drive currents. The LED material is based on double heterojunction (DH) AlGaAs/GaAs technology.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (mm).
2. TOLERANCE ARE $\pm .010$ " UNLESS OTHERWISE SPECIFIED.
3. AN EPOXY MENISCUS MAY EXTEND ABOUT .040" (1 mm) DOWN THE LEADS.



ABSOLUTE MAXIMUM RATING (T_A =25°C)

| Parameter | RED | UNITS |
|---------------------------------------|-------------|-------|
| Power Dissipation | 87 | mW |
| Peak Forward Current (f=1kHz, DF=10%) | 300 | mA |
| Continuous DC Forward Current | 30 | mA |
| Lead Soldering Time at 260° C | 5 | sec |
| Operating Temperature | -20 to +100 | °C |
| Storage Temperature | -55 to +100 | °C |

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

| Parameter | HLMP-K101 | HLMP-K105 | HLMP-D101A | HLMP-D105A | Condition |
|--------------------------|-----------|-----------|------------|------------|------------------------|
| Luminous Intensity (mcd) | | | | | I _F = 20mA |
| Minimum | 22 | 35 | 35 | 100 | |
| Typical | 45 | 65 | 70 | 240 | |
| Forward Voltage (V) | | | | | I _F = 20mA |
| Maximum | 2.2 | 2.2 | 2.2 | 2.2 | |
| Typical | 1.8 | 1.8 | 1.8 | 1.8 | |
| Peak Wavelength (nm) | 660 | 660 | 660 | 660 | I _F = 20mA |
| Spectral Line Half Width | 20 | 20 | 20 | 20 | I _F = 20mA |
| Reverse Voltage (V) | 5 | 5 | 5 | 5 | I _R = 100μA |
| Viewing Angle (°) | 60 | 45 | 65 | 24 | I _F = 20mA |

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

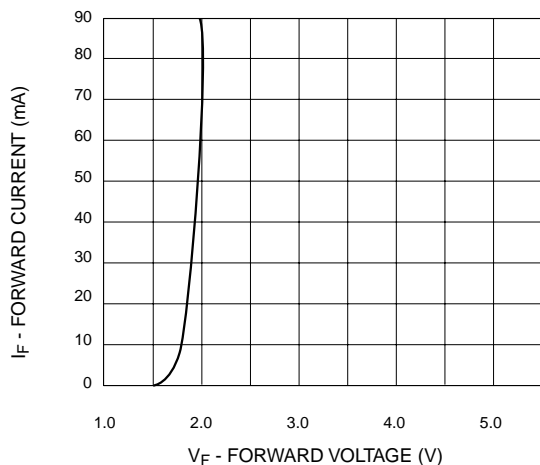


Fig. 1 Forward Current vs. Forward Voltage

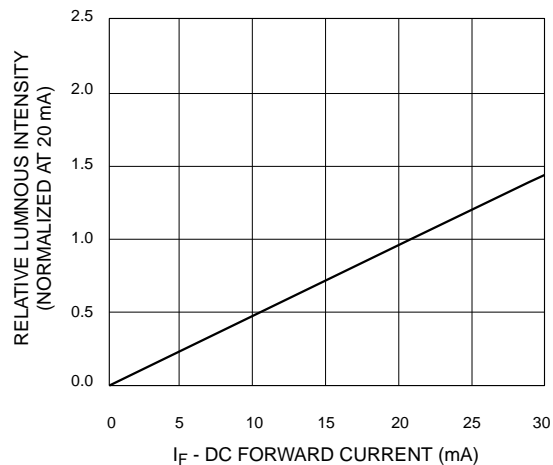


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

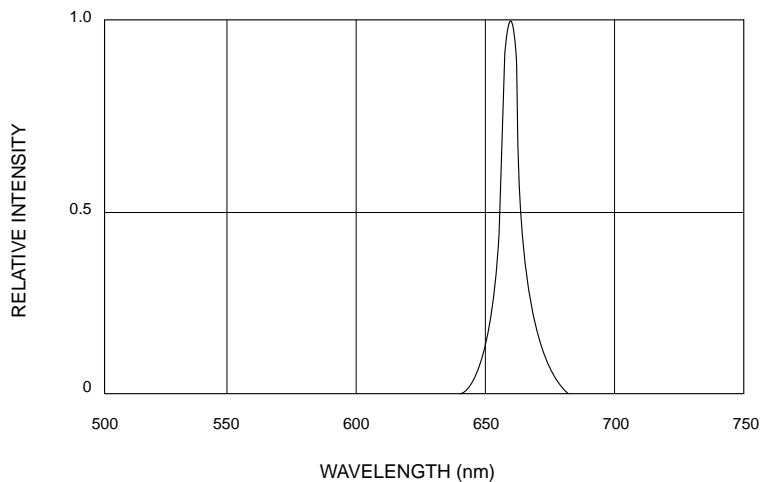


Fig. 3 Relative Intensity vs. Peak Wavelength

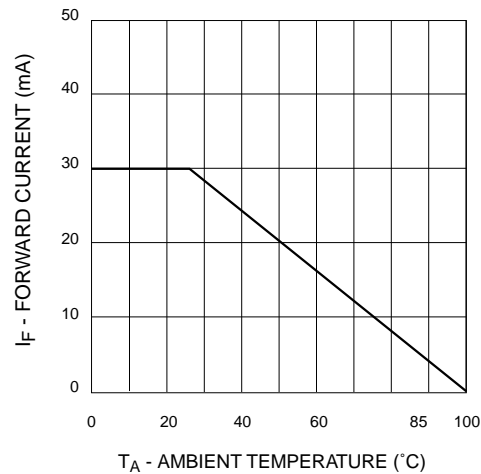
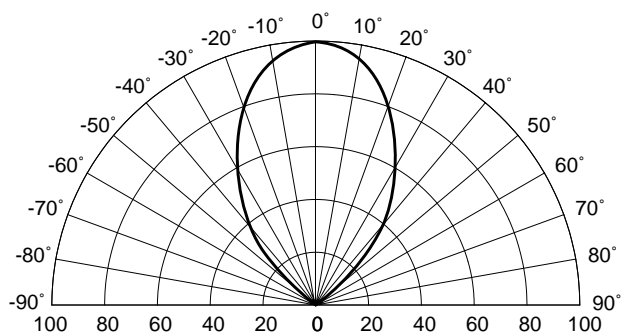


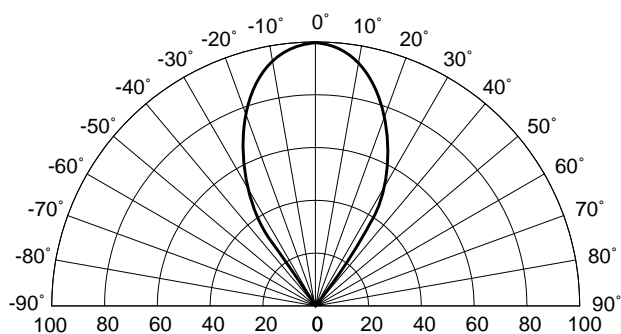
Fig. 4 Current Derating Curve

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



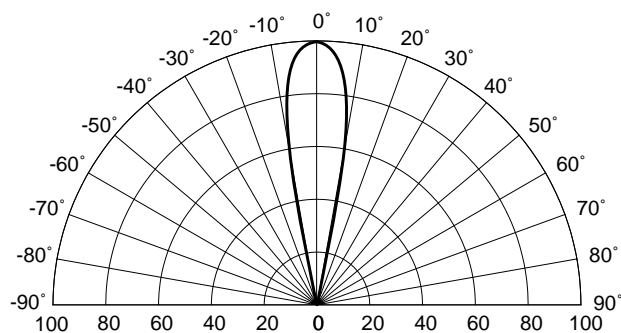
REL. LUMINOUS INTENSITY (%)

Fig. 5A Radiation Diagram (HLMP-D101A)



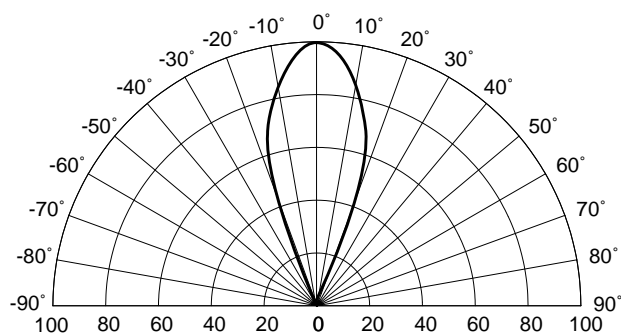
REL. LUMINOUS INTENSITY (%)

Fig. 5B Radiation Diagram (HLMP-K101)



REL. LUMINOUS INTENSITY (%)

Fig. 5C Radiation Diagram (HLMP-D105A)



REL. LUMINOUS INTENSITY (%)

Fig. 5D Radiation Diagram (HLMP-K105)

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