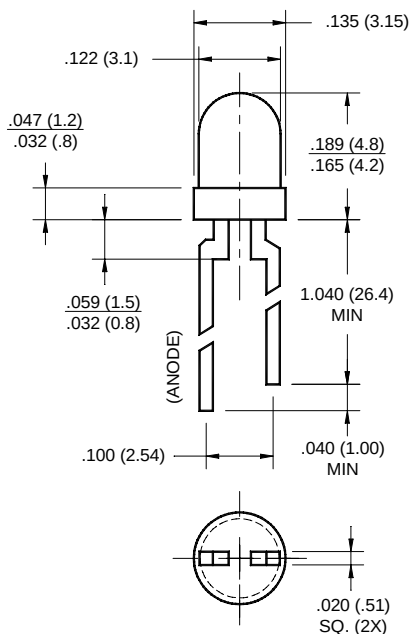


T-1 3/4 (5mm)
HLMP-D101A
Red Diffused
HLMP-D105A
Red Clear with Standoff
T-100 (3mm)
HLMP-K101
Red Diffused
HLMP-K105
Red Clear

PACKAGE DIMENSIONS


HLMP-K101/K105

FEATURES

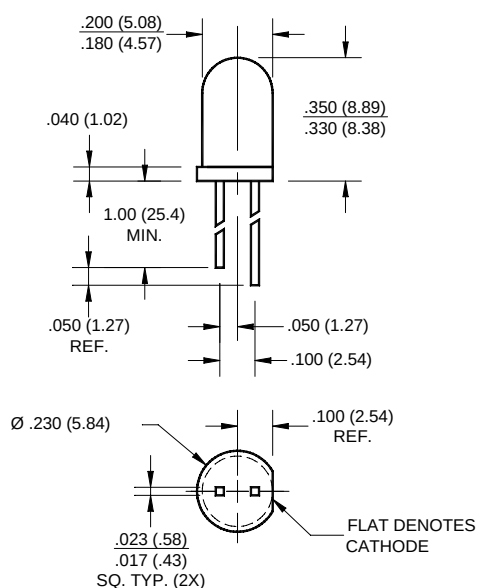
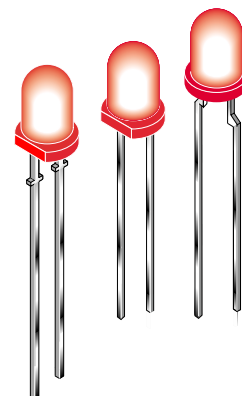
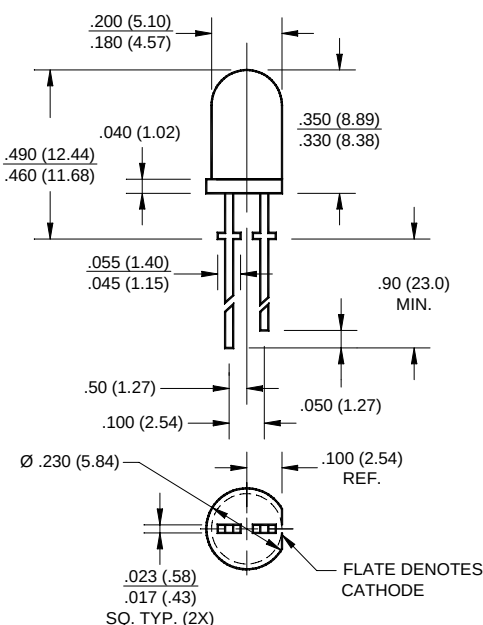
- Wide Viewing Angle
- Deep Red Color

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.


HLMP-D101A

HLMP-D105A

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

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

Parameter	HLMP-K101	HLMP-K105	HLMP-D101A	HLMP-D105A	Condition
Luminous Intensity (mcd)					$I_F = 20\text{mA}$
Minimum	22	35	35	100	
Typical	45	65	70	240	
Forward Voltage (V)					$I_F = 20\text{mA}$
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	$I_F = 20\text{mA}$
Spectral Line Half Width	20	20	20	20	$I_F = 20\text{mA}$
Reverse Voltage (V)	5	5	5	5	$I_R = 100\mu\text{A}$
Viewing Angle (°)	60	45	65	24	$I_F = 20\text{mA}$

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

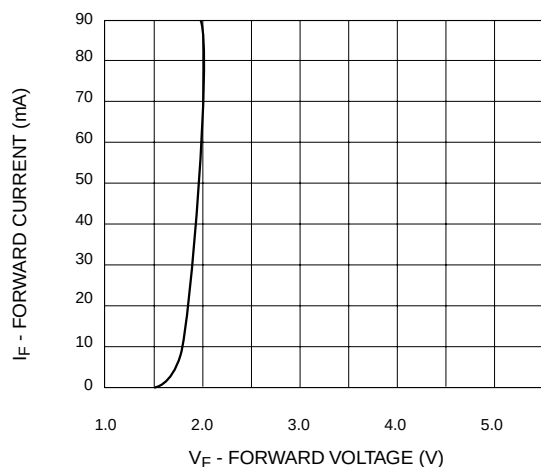


Fig. 1 Forward Current vs. Forward Voltage

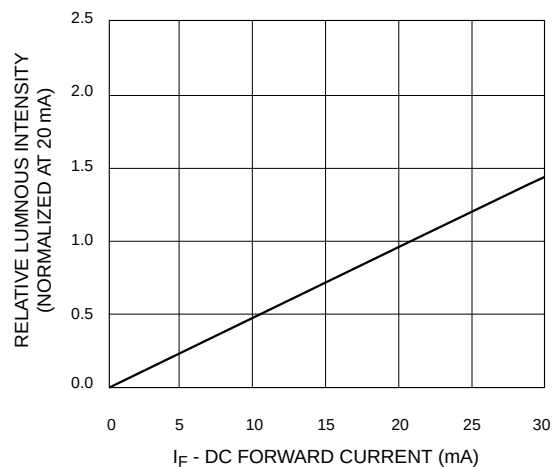


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

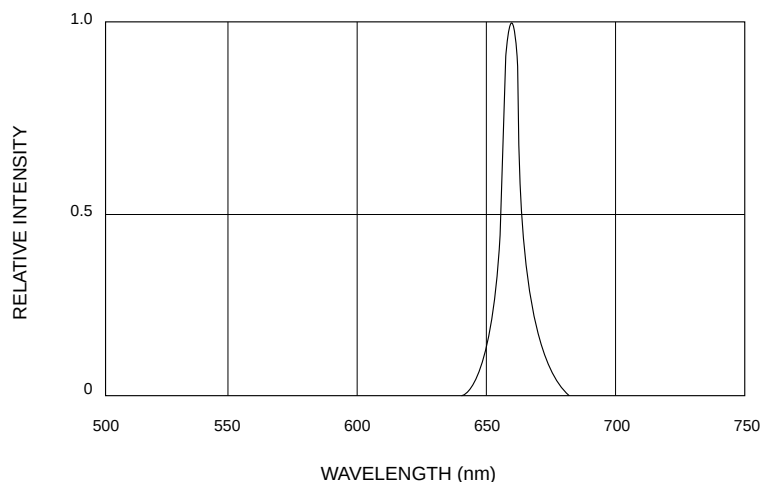


Fig. 3 Relative Intensity vs. Peak Wavelength

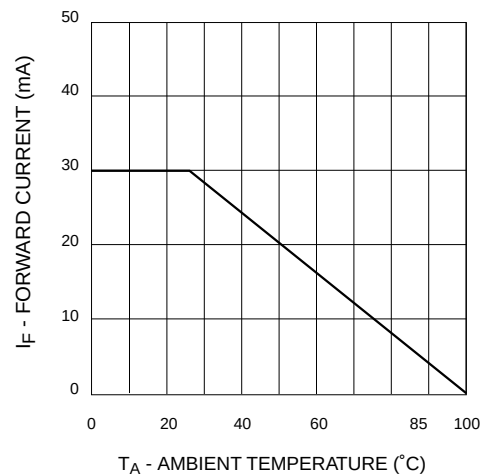
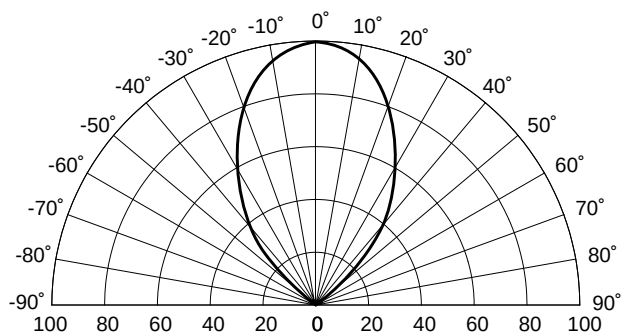


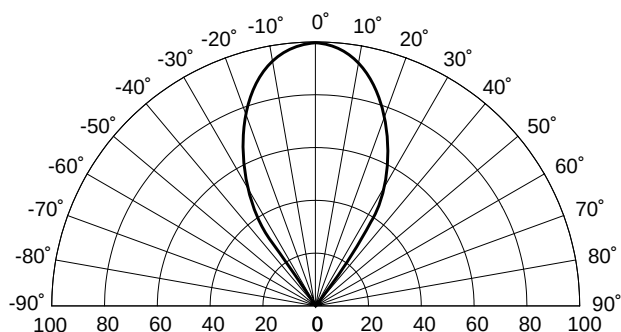
Fig. 4 Current Derating Curve

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



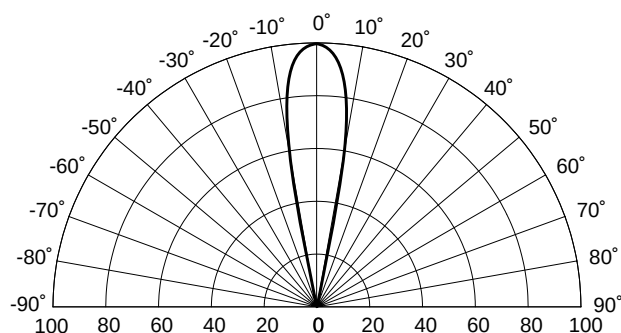
REL. LUMINOUS INTENSITY (%)

Fig. 5A Radiation Diagram (HLMP-D101A)



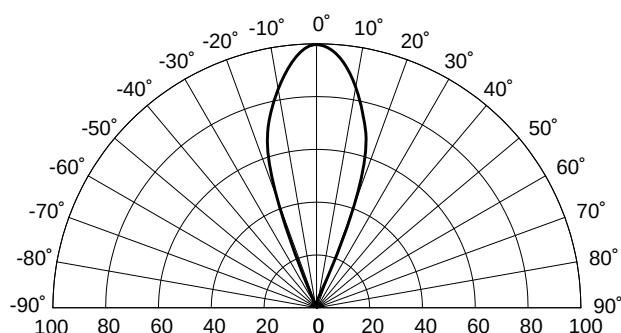
REL. LUMINOUS INTENSITY (%)

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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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.