

T-1 3/4 (5mm)

HLMP-D101A

Red Diffused

HLMP-D105A

Red Clear with Standoff

T-100 (3mm)

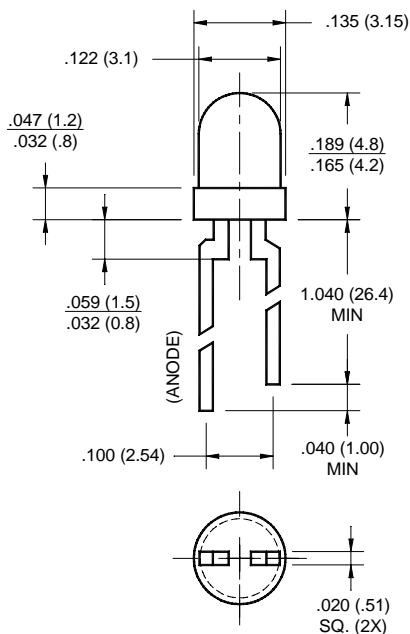
HLMP-K101

Red Diffused

HLMP-K105

Red Clear

## PACKAGE DIMENSIONS

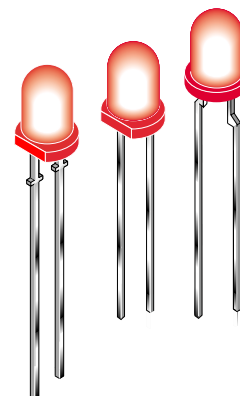


## FEATURES

- Wide Viewing Angle
- Deep Red Color

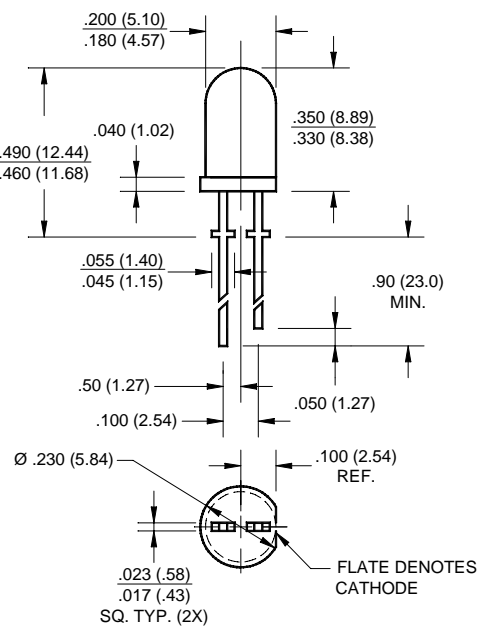
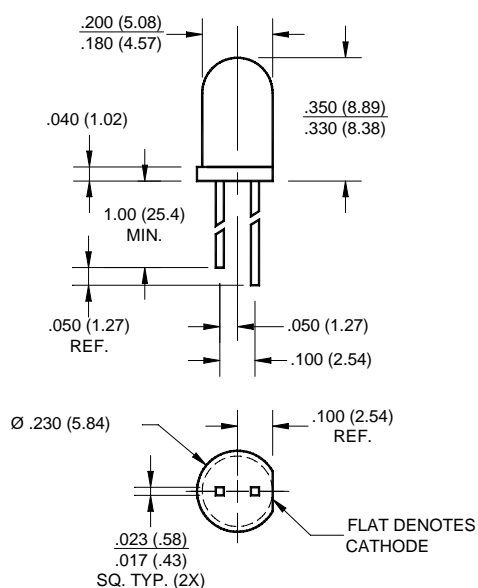
## DESCRIPTION

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.



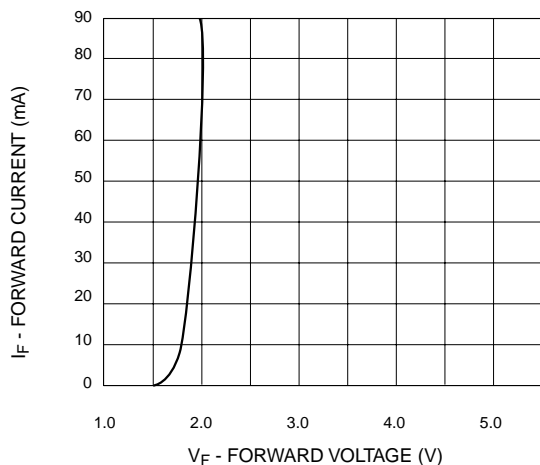
**ABSOLUTE MAXIMUM RATING** (T<sub>A</sub> =25°C)

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

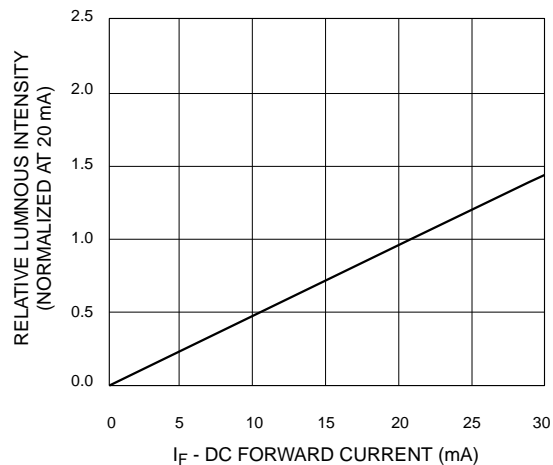
**ELECTRICAL / OPTICAL CHARACTERISTICS** (T<sub>A</sub> =25°C)

Parameter	HLMP-K101	HLMP-K105	HLMP-D101A	HLMP-D105A	Condition
Luminous Intensity (mcd)					I <sub>F</sub> = 20mA
Minimum	22	35	35	100	
Typical	45	65	70	240	
Forward Voltage (V)					I <sub>F</sub> = 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 <sub>F</sub> = 20mA
Spectral Line Half Width	20	20	20	20	I <sub>F</sub> = 20mA
Reverse Voltage (V)	5	5	5	5	I <sub>R</sub> = 100μA
Viewing Angle (°)	60	45	65	24	I <sub>F</sub> = 20mA

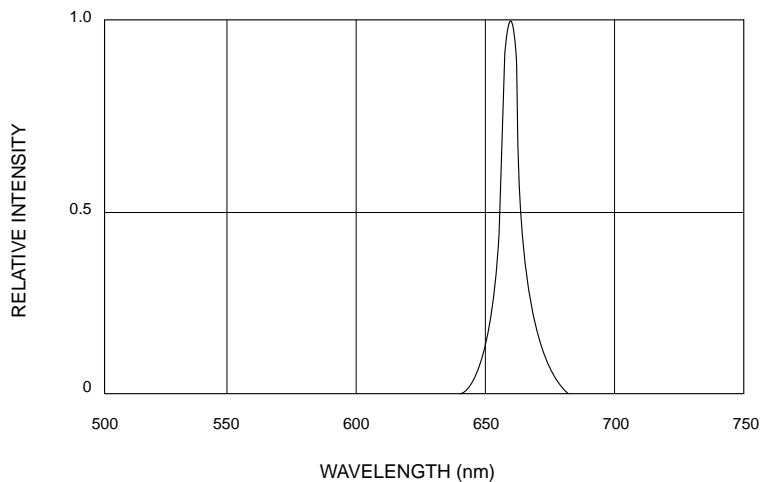
## TYPICAL PERFORMANCE CURVES ( $T_A = 25^\circ\text{C}$ )



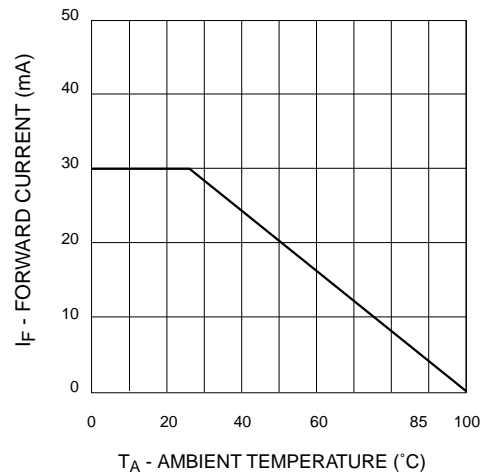
**Fig. 1 Forward Current vs. Forward Voltage**



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

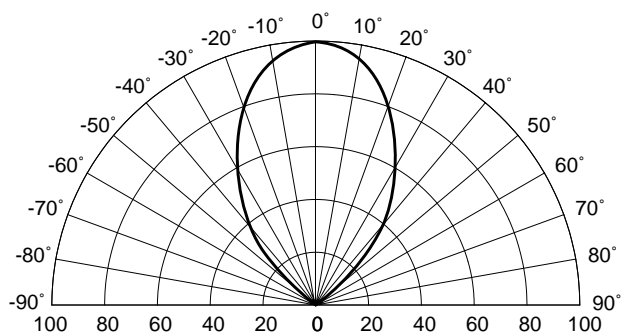


**Fig. 3 Relative Intensity vs. Peak Wavelength**

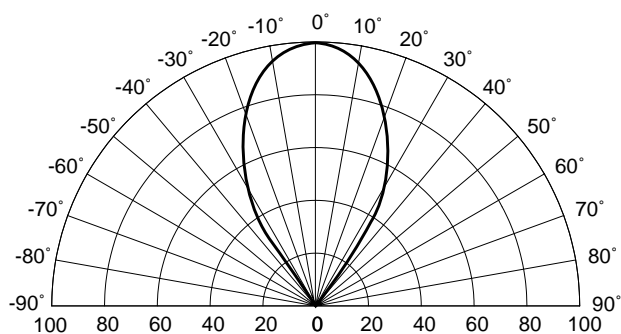


**Fig. 4 Current Derating Curve**

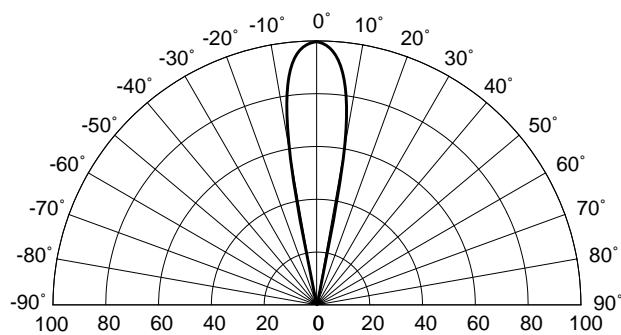
**TYPICAL PERFORMANCE CURVES** ( $T_A = 25^\circ\text{C}$ )



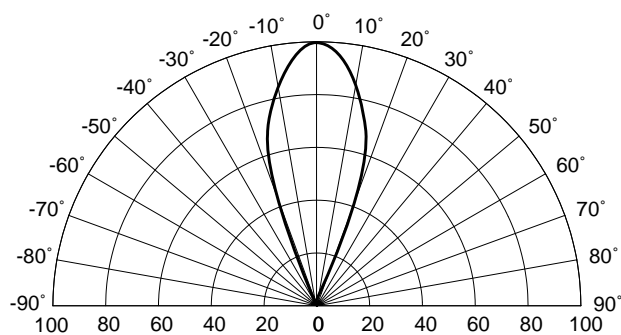
**Fig. 5A Radiation Diagram (HLMP-D101A)**



**Fig. 5B Radiation Diagram (HLMP-K101)**



**Fig. 5C Radiation Diagram (HLMP-D105A)**



**Fig. 5D Radiation Diagram (HLMP-K105)**

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