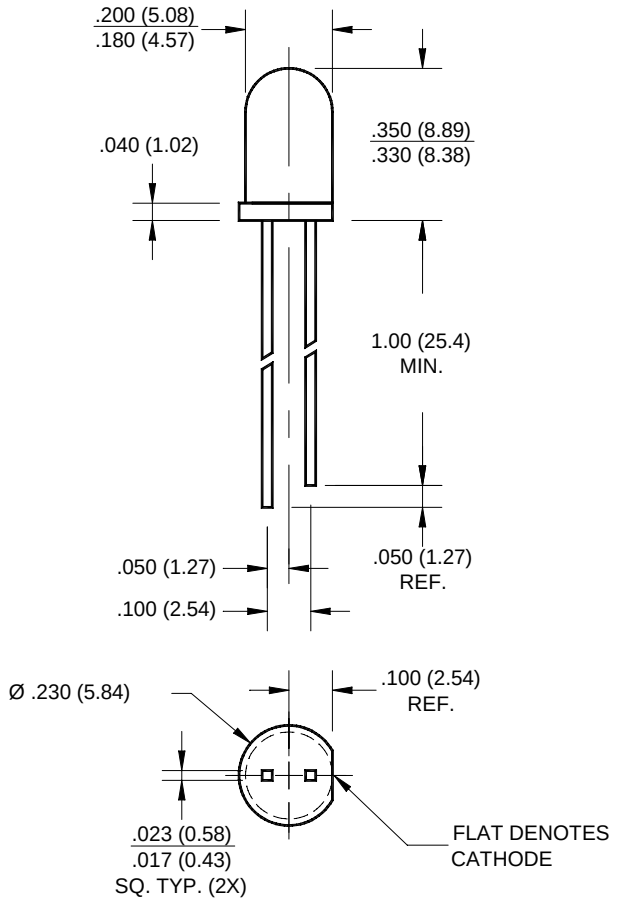
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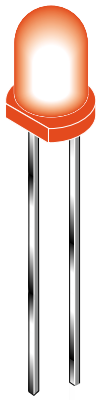
T-1 3/4 (5mm)
SOLID STATE LAMPS

PURE GREEN	HLMP-D600	TINTED
PURE GREEN	HLMP-D640	CLEAR
SOFT ORANGE	HLMP-D400	TINTED
SOFT ORANGE	HLMP-D401	TINTED

PACKAGE DIMENSIONS



FEATURES



- Popular T-1 3/4 package
- Low drive current
- Solid state reliability
- Wide viewing angle
- Choice of pure green or soft orange colors

DESCRIPTION

These T-1 3/4 LEDs are widely used as general purpose indicators. The pure green lamps is made with a GaP LED on a GaP substrate. The soft orange is made with a GaAsP LED on a GaP substrate. They are encapsulated in epoxy packages and are designed to provide superior light output and a wide viewing angle.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (mm).
2. TOLERANCES ARE ±.010" INCH UNLESS SPECIFIED.
3. AN EPOXY MENISCUS MAY EXTEND ABOUT .040" (1 mm) DOWN THE LEADS.

ABSOLUTE MAXIMUM RATING (T_A =25°C)

Parameter	GREEN	ORANGE	UNITS
Power Dissipation	110	110	mW
Forward Current	40	40	mA
Peak Forward Current (f=1kHz, DF=10%)	200	200	mA
Lead Soldering Time at 260° C	5	5	sec
Operating Temperature	-40 to +100	-40 to +100	°C
Storage Temperature	-40 to +100	-40 to +100	°C

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ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	HLMP-D600	HLMP-D640*	HLMP-D400	HLMP-D401	Condition
Luminous Intensity (mcd)					I_F = 10mA
Minimum	1.0	6.7	2.1	4.0	
Typical	3.0	6.0	3.5	7.0	
Forward Voltage (V)					I_F = 10mA
Maximum	2.7	3.0	2.4	2.4	
Typical	2.1	2.2	1.9	1.9	
Peak Wavelength (nm)	555	555	612	612	I_F = 10mA
Spectral Line Half Width (nm)	24	24	40	40	I_F = 10mA
Reverse Voltage (V)	5	5	5	5	I_R = 100µA
Viewing Angle (°)	60	24	60	60	I_F = 10mA

* HLMP-D640 test condition is I_F = 20mA

TYPICAL PERFORMANCE CURVES (T_A =25°C)

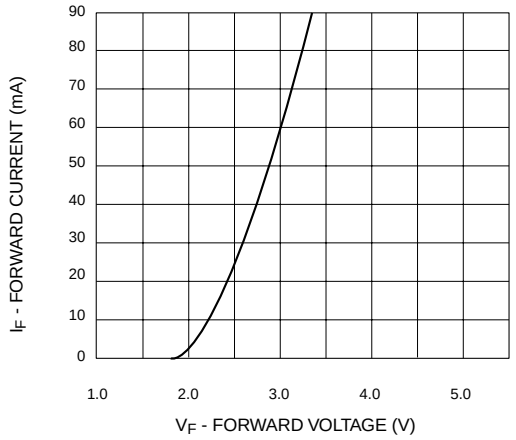


Fig. 1 Forward Current vs. Forward Voltage

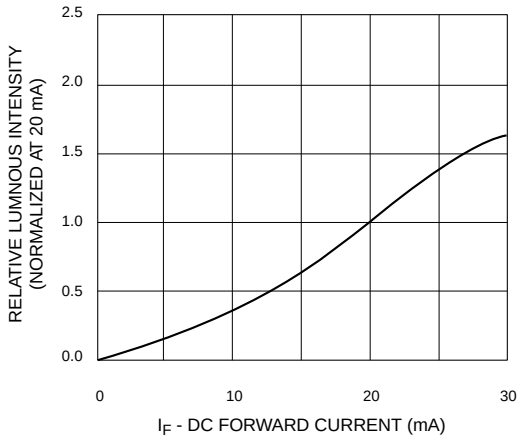


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

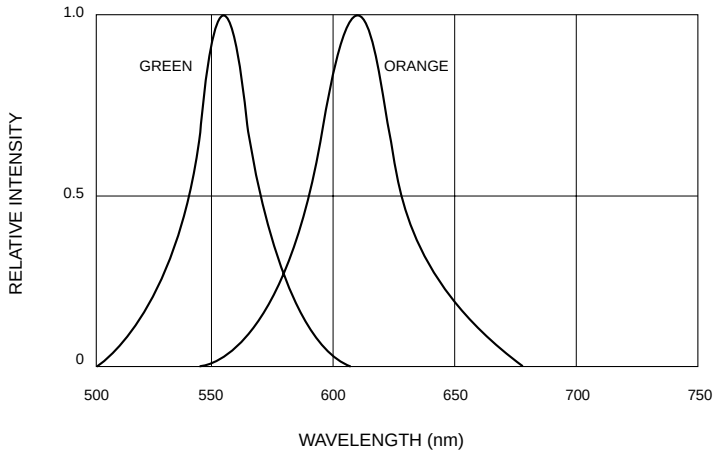


Fig. 3 Relative Intensity vs. Peak Wavelength

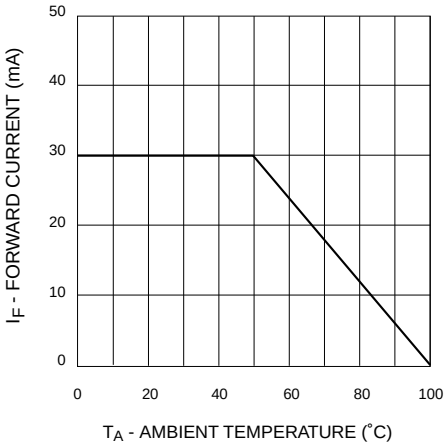


Fig. 4 Current Derating Curve

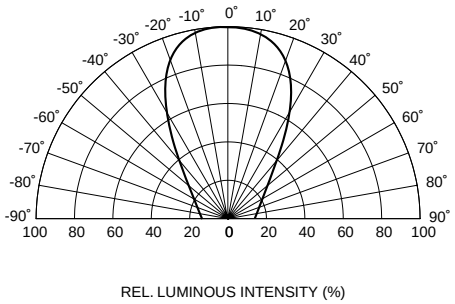


Fig. 5A Radiation Diagram
(HLMP-D600, HLMP-D400, HLMP-D401)

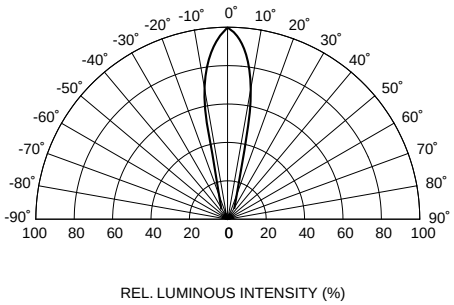


Fig. 5B Radiation Diagram
(HLMP-D640)

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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.