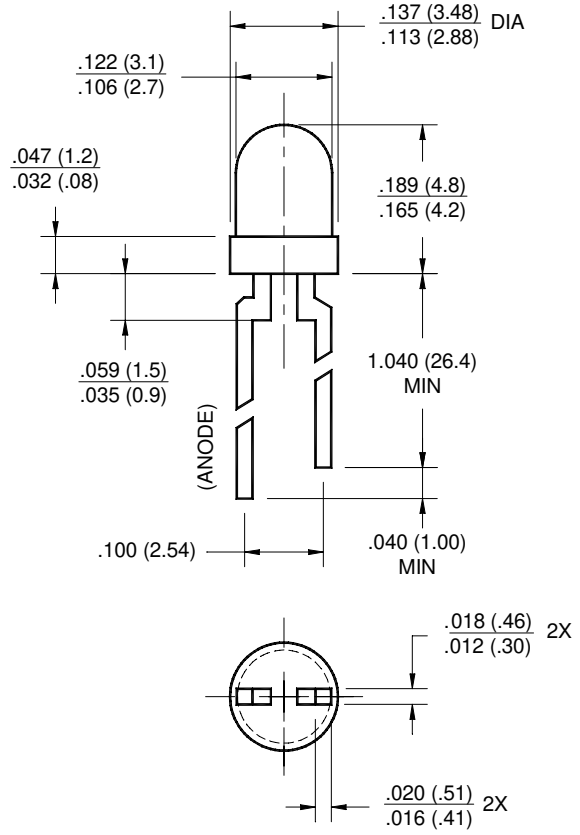
FAIRCHILD
SEMICONDUCTOR™

T-100 (3 mm)
SOLID STATE LAMPS

PURE GREEN	HLMP-K600	TINTED
PURE GREEN	HLMP-K640	CLEAR
SOFT ORANGE	HLMP-K400	TINTED
SOFT ORANGE	HLMP-K401	TINTED
SOFT ORANGE	HLMP-K402	TINTED

PACKAGE DIMENSIONS



FEATURES

- Popular T-100 package
- Low drive current
- Solid state reliability
- Wide viewing angle
- Choice of pure green or soft orange colors

DESCRIPTION

These T-100 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. LEAD SPACING IS MEASURED WHERE THE LEADS EMERGE FROM THE PACKAGE.
3. PROTRUDED RESIN UNDER THE FLANGE IS 1.5 mm (.059) MAX.

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

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	HLMP-K600	HLMP-K640*	HLMP-K400	HLMP-K401	HLMP-K402	Condition
Luminous Intensity (mcd)						I_F = 10mA
Minimum	1.0	4.0	1.0	2.0	3.0	
Typical	4.5	15.0	4.0	5.0	7.0	
Forward Voltage (V)						I_F = 10mA
Maximum	2.7	3.0	2.4	2.4	2.4	
Typical	2.1	2.2	1.9	1.9	1,9	
Peak Wavelength (nm)	555	555	612	612	612	I_F = 10mA
Spectral Line Half Width (nm)	24	24	40	40	40	I_F = 10mA
Reverse Voltage (V)	5	5	5	5	5	I_R = 100µA
Viewing Angle (°)	90	45	90	90	90	I_F = 10mA

* HLMP-K640 test condition is I_F = 20mA

TYPICAL PERFORMANCE CURVES (T_A =25°C)

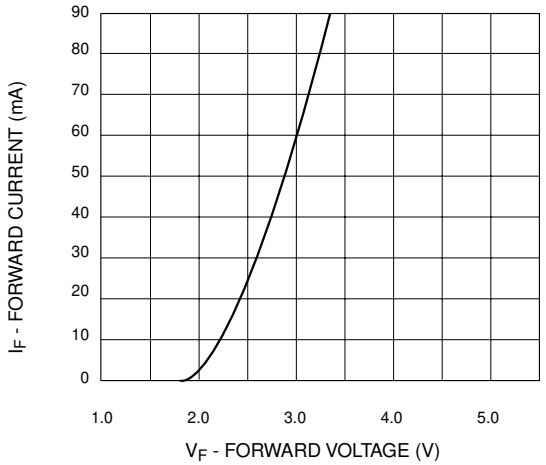


Fig. 1 Forward Current vs. Forward Voltage

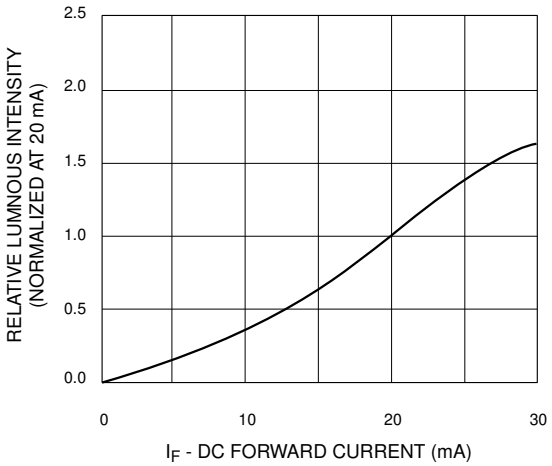


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

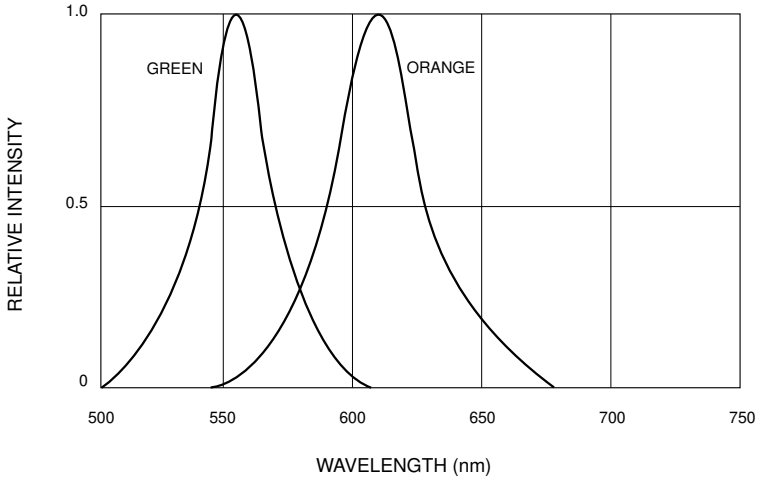


Fig. 3 Relative Intensity vs. Peak Wavelength

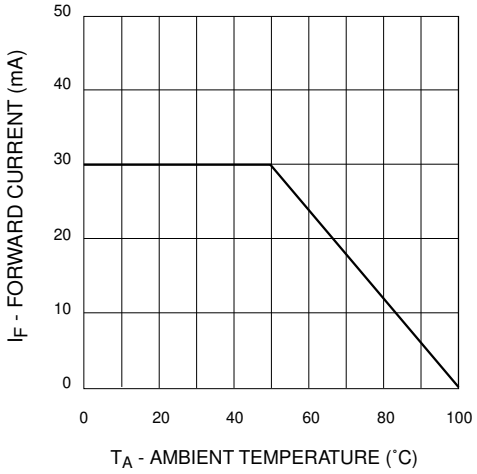


Fig. 4 Current Derating Curve

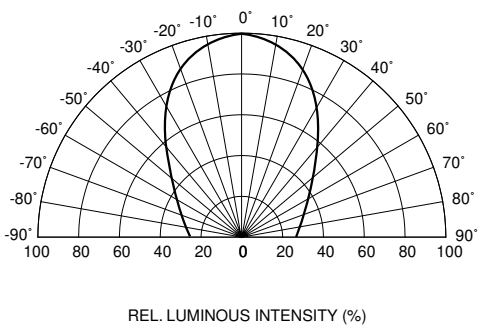


Fig. 5A Radiation Diagram
(HLMP-K600, HLMP-K400, HLMP-K401, HLMP-K402)

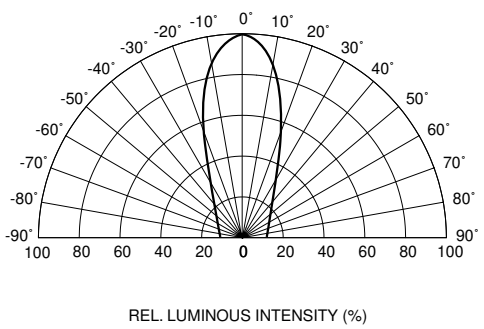


Fig. 5B Radiation Diagram
(HLMP-K640)

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