

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

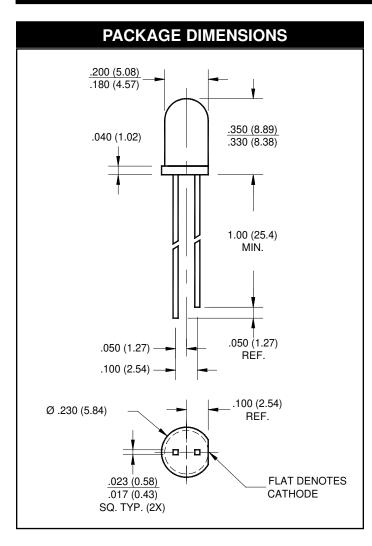
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







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



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.
- AN EPOXY MENISCUS MAY EXTEND ABOUT .040" (1 mm) DOWN THE LEADS.

ABSOLUTE MAXIMUM RATING (TA =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 (TA =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	$I_R = 100 \mu A$		
Viewing Angle (°)	60	24	60	60	I _F = 10mA		

^{*} HLMP-D640 test condition is $I_F = 20mA$



30

TYPICAL PERFORMANCE CURVES (TA =25°C) 2.5 80 RELATIVE LUMNOUS INTENSITY (NORMALIZED AT 20 mA) 2.0 IF - FORWARD CURRENT (mA) 70 60 1.5 50 40 1.0 30 20 0.5 10 0 0.0 4.0 1.0 2.0 3.0 5.0 0 20 VF - FORWARD VOLTAGE (V) IF - DC FORWARD CURRENT (mA)



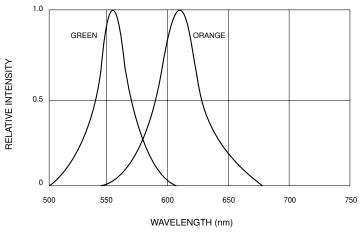


Fig. 3 Relative Intensity vs. Peak Wavelength

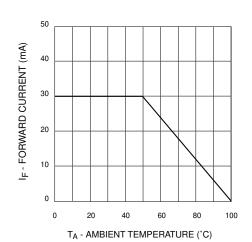
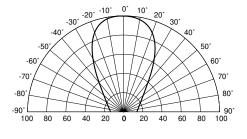


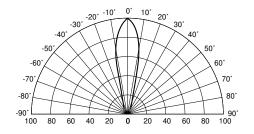
Fig. 2 Relative Luminous Intensity vs. DC Forward Current

Fig. 4 Current Derating Curve



REL. LUMINOUS INTENSITY (%)

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



REL. LUMINOUS INTENSITY (%)

Fig. 5B Radiation Diagram
(HLMP-D640)



DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

- Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body,or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in labeling, can be reasonably expected to result in a significant injury of the user.
- 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.