



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



Cree XM-L Color Series

Cree XLamp XM-L color LEDs are the brightest and smallest multi-colored LEDs of their class, delivering red, green, royal-blue and white in one LED at twice the lumens-per-dollar of the MC-E color LED. The XM-L color LED is 60% smaller than the MC-E LED, reducing the distance between LED die to create a small optical source for excellent optical control, efficient color mixing and simplified design.



FEATURES

- > Red, green, blue and white in a single 5 mm x 5 mm package
- > Maximum drive current per LED die: 1 A
- > Individually addressable LEDs
- > Electrically Neutral Thermal Path

APPLICATIONS

- > Architectural
- > Entertainment
- > Vehicle

FLUX CHARACTERISTICS @ 25°C

COLOR	DWL (nm) or CCT (TYP.)	MIN.FLUX (LM) @350MA	KIT USED
Red	620-635	45.7	
Green	520-535	87.4	C3ABC02
Royal Blue	450-465	13.9	(6000K)
Cool White	5700-8000	80-100	C2ABCB1
Neutral White	3700-4300	80-100	(4000K)

CHARACTERISTICS	UNIT	MINIMUM	TYPICAL	MAXIMUM
Viewing angle (FWHM)	degrees		130	
Thermal Resistance, Junction to Solder Point	°C/W		3.5	
ESD classification (HBM per Mil-Std-883D)			Class 2	
LED junction temperature	°C			150
Temperature coefficient of voltage - red	mV/°C		-1.8	
Temperature coefficient of voltage - green	mV/°C		-4	
Temperature coefficient of voltage - blue, white	mV/°C		-3	
Reverse voltage - red, green, blue, white	V		2.25	2.6
Reverse voltage - green	V		3.3	3.9
Reverse voltage - blue, white	V		3.1	3.7

It is highly recommended for the user to review the CREE Series page for additional and most recent technical data at:
<http://www.cree.com/led-components-and-modules/products/xlamp/arrays-directional/xlamp-xml-color>

- * Exceeding maximum ratings may damage the LED and cause potential safety hazards.
- * Elevated operating temperatures can be expected to negatively impact the service life (lumen output)
- * All data is related to entire assembly. Data reflects statistical mean values. Actual data may differ depending on variances in the manufacturing process.
- * End users need to take into account the lumen depreciation as the temperature rises with various thermal solutions installed.

Note 1: Using continuously under elevated loads (i.e. the application of high temperature/current/voltage or a significant change in temperature, etc.) may cause this product to significantly decrease in reliability even if the operating conditions are within the absolute maximum ratings.

Note 2: The thermal resistance from the LED junction to ambient temperature, $R_{th(j-a)}$, should be kept below 10°C/W so that the LED is not exposed to a condition beyond the absolute maximum ratings.

Note 3: The temperature of the LED assembly must be measured at the TC-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

Hardware (not included)

- > Mount with #4 Machine Screws.
- > 16AWG Maximum Wire Gauge.
- > Use only with constant current power supplies.

PCB Fabrication

- > Layer Count: 1
- > Core Material: 6061-T6 Aluminum
- > Single Layer Copper Weight: 1oz
- > Solder Mask: White
- > Finishing Plating: Pb Free HASL

