

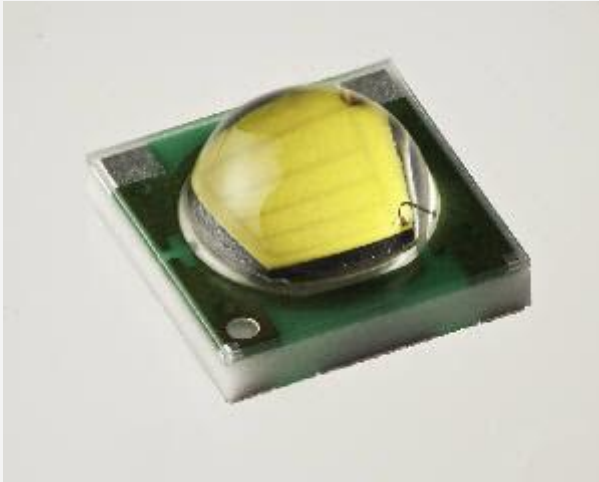


XLamp XP-C

Now with brighter color flux bins

The XLamp XP-C LED combines the proven lighting-class performance and reliability of the XLamp XR-E LED in a package with 80% smaller footprint. This smaller package extends Cree's award-winning LED performance into new LED lighting applications.

Size (mm x mm)	3.45 x 3.45
Product options	White, Color
Maximum drive current (A) - White	0.5
Maximum power (W) - White	2
Light output - White	Up to 138 lm @ 3.5 W
Typical forward voltage @ 350 mA (V) - White	3.4
Viewing angle (degrees) - White	115
Binning	Standard (White), ANSI (White)
Thermal resistance (°C/W) - White	12
Reflow-solderable	Yes – JEDEC J-STD-020C-compatible
RoHS and REACH-compliant	Yes
UL-recognized-component	Yes - Level 4 Enclosure Consideration

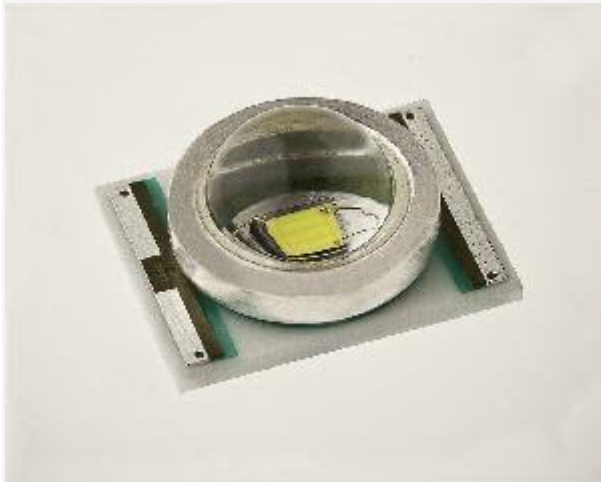


XLamp XP-G

Now available in higher flux bins

Optimized for high lumen directional lighting applications, the XLamp XP-G LED set a new standard for light output and efficacy in a small form factor LED. The XLamp XP-G LED is capable of delivering up to 493 lumens at 93 lumens per watt when driven at 1.5 A. Others have tried to match its performance but no one has come close. Now, the XLamp XP-G LED is even brighter. Available in higher flux bins, the XLamp XP-G is the first LED with over 10,000 hrs of LM-80 long-term testing data, a TM-21 Reported Lifetime of greater than 60,000 hrs, and it is still raising the bar for LED performance.

Size (mm x mm)	3.45 x 3.45
Maximum drive current (A)	1.5
Maximum power (W)	4.9
Light output	Up to 493 lm @ 4.9 W
Typical forward voltage @ 0.35 A (V)	2.9
Viewing angle (degrees)	125
Binning	ANSI
Thermal resistance (°C/W)	4
Reflow-solderable	Yes – JEDEC J-STD-020C-compatible
RoHS and REACH-compliant	Yes
UL-recognized-component	Yes - Level 4 Enclosure Consideration

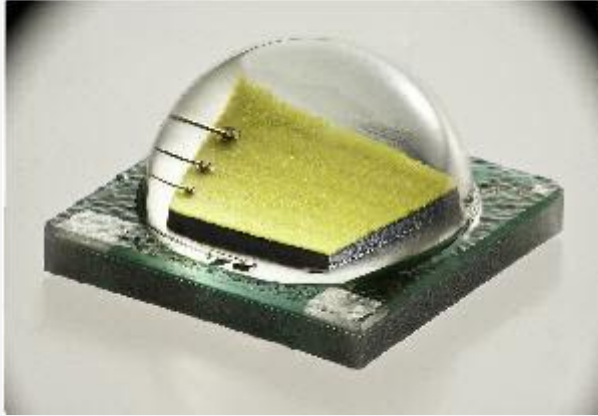


XLamp XR-E

Cree's Lighting-Class Power LEDs

The XLamp XR-E LED is leading the LED lighting revolution with its unprecedented lighting-class brightness, efficacy, lifetime and quality of light. These lighting-class features enable the XLamp XR-E LED to replace many traditional light sources and save money with energy-efficient light and long lifetimes.

Size (mm x mm)	7 x 9
Product options	White, Color
Maximum drive current (A)	1 (Cool White), 0.7 (Warm and Neutral White)
Maximum power (W)	4
Light output	Up to 251 lm @ 4 W
Typical forward voltage (V) @ 350 mA	3.3
Viewing angle (degrees) - White	90
Binning	Standard
Thermal resistance (°C/W)	8
Reflow-solderable	Yes – JEDEC J-STD-020C-compatible
RoHS and REACH-compliant	Yes



XLamp XM-L

High Lumen Output, High Efficacy

XLamp XM-L LEDs offer the unique combination of very high efficacy at very high drive currents, delivering 1000 lumens with 100 lumens-per-watt efficacy at 3 A in a compact, 5-mm x 5-mm footprint. With its breakthrough light output and efficacy, the XM-L LED is designed for very-high-lumen applications such as high-bay, indoor commercial or roadway lighting. The XM-L LED can lower total system cost by reducing the number of LEDs and optics in the system.

Size (mm x mm)	5 x 5
Maximum drive current (A)	3
Maximum power (W)	10
Light output	Up to 1040 lm @ 10 W
Typical forward voltage (V)	3.1
Viewing angle (degrees)	125
Binning	ANSI
Thermal resistance (°C/W)	2.5
Reflow-solderable	Yes – JEDEC J-STD-020C-compatible
RoHS and REACH-compliant	Yes
UL-recognized-component	Yes - Level 4 Enclosure Consideration