

LED Quality Assurance:

What is the difference between Vivid Leds products and other LED fixtures and lamps on the market?

Quality. At Vivid Leds, Inc. we strive to use the latest generation LED chip technology from top branded manufacturers like CREE, Bridgelux USA, Edison and Philips.

What types of LEDs are there and why is Vivid Leds products superior?

At Vivid Leds, we use COB and SMD LED technology to ensure the highest lumen output, efficiency and quality, resulting in long life. This is how we can achieve a lifespan of over 100,000 hours, unlike other manufacturer's products. Here is an example of how LED's have progressed:

First Generation LED - DIP (Dual In-Line Package):

There are many products on the market today still using this technology. DIP LED's are connected to the board using wire pins (leads). The pins hang vertically from the two long edges of the LED, spaced at intervals of 0.1 inch. The leads fit through holes in the circuit board to which they are soldered or into a socket.

Second Generation LED - SMD (Surface Mount Device):

An SMD LED does not have leads like DIP. Instead, the LED is mounted and soldered directly onto the surface of a printed circuit board by tiny metallic contacts.

Third Generation LED - COB (Chip On Board):

COB refers to the semiconductor assembly technology wherein the microchip or die is directly mounted on and electrically interconnected to its final circuit board, instead of undergoing traditional assembly or packaging like SMD or DIP. The elimination of conventional device packaging from COB assemblies simplifies the over-all process of designing and manufacturing the final product, as well as improves its performance as a result of the shorter interconnection paths. COB LED has the highest reliability due to better heat distribution and a lower number of solder joints.

How can I tell what brand LED chip Vivid Leds uses or other manufacturer's?

Physically it is difficult to recognize the name of an LED chip inside a fixture. At Vivid Leds, Inc., we list the LED chip manufacturer name on all of our specification sheets so you know exactly the quality you will receive. We also provide LM80 reports from the LED chip manufacture's to display their test results.

For more information or to speak to one of our LED experts, please contact us from the information below.