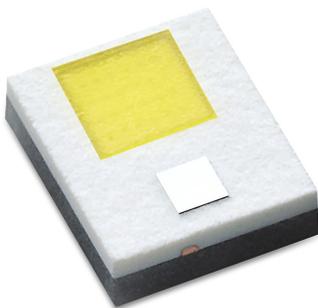




# LUXEON F Plus Cool White

Industry-leading solutions for low and high beam lamps



LUXEON F Plus Cool White LEDs are the only automotive LEDs that deliver design flexibility and advanced functionality. These products, with their miniaturized form factor, are designed to support daytime running lamps, front fog and low and high beam applications. The Lumileds automotive binning structure meets both SAE and ECE color specifications and is hot binned at 85°C, consistent with actual automotive operational environments. LUXEON F Plus Cool White provides an industry-leading solution for your front and rear applications. All LUXEON F LEDs are AEC-Q101 qualified.

## FEATURES AND BENEFITS

Higher drive current capability for increased flux performance

Low thermal resistance for better hot lumen performance

Standard packaging for low cost and ease of manufacturability

Hot binned at 85°C MP to match closer to operating conditions

IEC/PAS62707-1 White LED

## PRIMARY APPLICATIONS

Daytime Running Lights

Front Fog

Headlight

- Low Beam
- High Beam
- Cornering Light

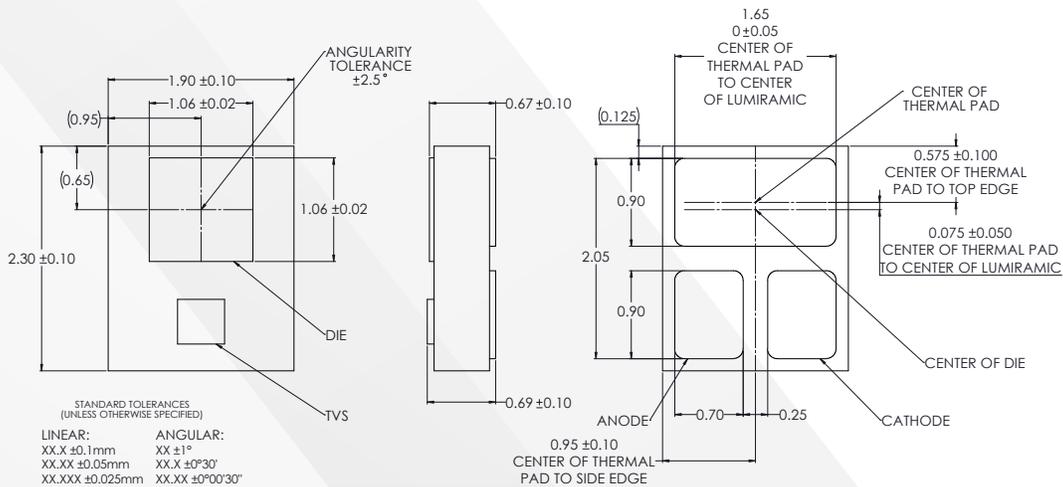
## LUXEON F Plus Cool White Absolute Ratings.

PARAMETER	PERFORMANCE
Minimum DC Forward Current	50mA
Maximum DC Forward Current	1500mA
Maximum Junction Temperature <sup>[1]</sup>	150°C
Maximum Junction Temperature for <200 Hours (1500mA)	175°C
Operating Case Temperature at Test Current <sup>[1]</sup>	-40°C to 130°C
Operating Case Temperature at Maximum Current <sup>[1]</sup>	-40°C to 130°C
LED Storage Temperature	-40°C to 130°C
Maximum Soldering Temperature	260°C
Allowable Reflow Cycles	3
ESD Sensitivity <sup>[2]</sup>	±8 kV HBM, ±400 V MM, ±2kV CDM
Reverse Voltage ( $V_{reverse}$ )	LUXEON LEDs are not designed to be driven in reverse bias
Autoclave Conditions	121°C at 2 ATM 100% Relative Humidity for 96 Hours Maximum

### Notes:

- Proper current derating must be observed to maintain junction temperature below the maximum, so that the LED is maintained below the maximum rated operating case temperature. LUXEON F Plus Cool White LEDs driven at or above the maximum rated operating case temperature may have shorter lifetime.
- Measured using human body model (per JESD22 A114), machine model (per JESD22 A115) and charged device model (per JESD22-C101F).

## Mechanical Dimensions.



### Notes:

- Drawings are not scale.
- All dimensions are in millimeters.