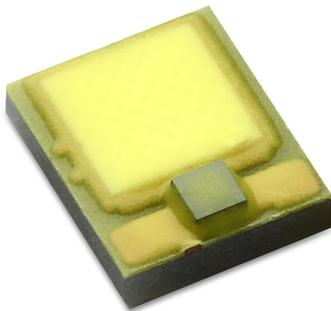




# LUXEON F EX Cool White

Industry-leading solutions for light guide  
DRL, and signature lamps



LUXEON F EX 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 lights, 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 EX Cool White provides an industry-leading solution for your front automotive lights applications. All LUXEON F LEDs are IEC-60810 qualified.

## FEATURES AND BENEFITS

- Higher drive current capability for increased flux performance
- Maximum 1.2A DC forward current
- Low thermal resistance for better hot lumen performance
- Standard packaging for low cost and ease of manufacturability
- Hot binned at 85°C monopulse (MP) to match closer to operating conditions
- IEC/PAS 62707-1 White LED

## PRIMARY APPLICATIONS

- Daytime Running Lights
- Front Fog
- Headlight

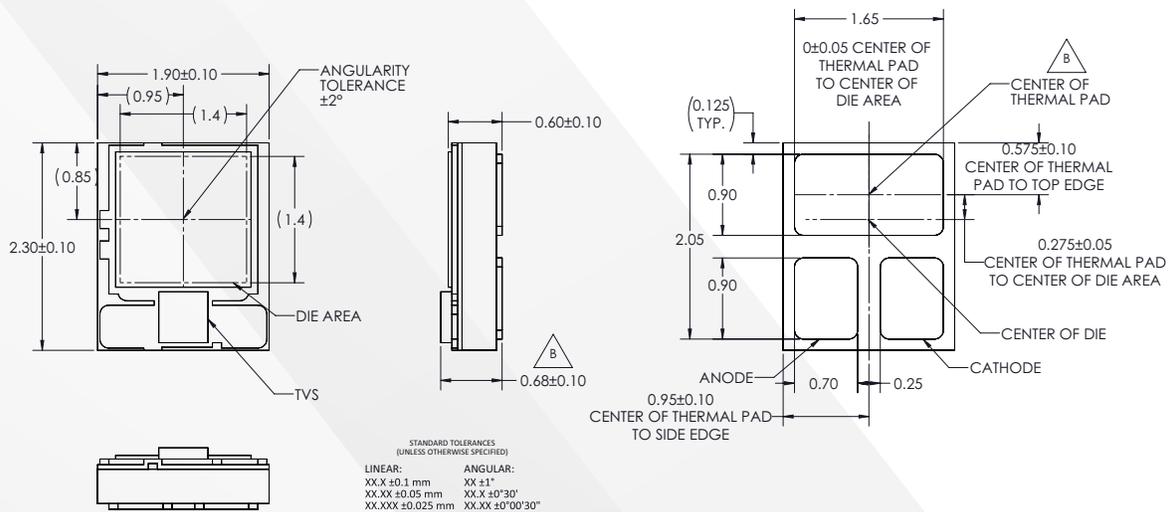
## LUXEON F EX Cool White Absolute Ratings.

PARAMETER	PERFORMANCE
Minimum DC Forward Current	50mA
Maximum DC Forward Current	1200mA
Maximum Junction Temperature <sup>[1]</sup>	150°C
Operating Case Temperature at Test Current <sup>[1]</sup>	-40°C to 125°C
Operating Case Temperature at Maximum Current <sup>[1]</sup>	-40°C to 125°C
LED Storage Temperature	-40°C to 130°C
Maximum Soldering Temperature	260°C
Allowable Reflow Cycles	3
ESD Sensitivity <sup>[2]</sup>	±8kV HBM, ±400V MM, ±2kV CDM
Reverse Voltage ( $V_{reverse}$ )	LUXEON F 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. LUXEON F LEDs driven at or above maximum LED case temperature may have a shorter lifetime.
- Measured using human body model (per JESD22 A114), machine model (per JESD22 A115) and charged device model (per JESD22 C101).

## Mechanical Dimensions.



### Notes:

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