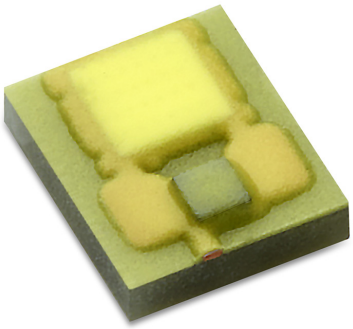
LUMILEDS

AUTOMOTIVE



LUXEON F Cool White

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



LUXEON F 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 backup/reverse, daytime running lights, and license plate 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 Cool White provides an industry-leading solution for your front and rear applications. All LUXEON F LEDs are AEC-Q101 qualified.

FEATURES AND BENEFITS

- 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

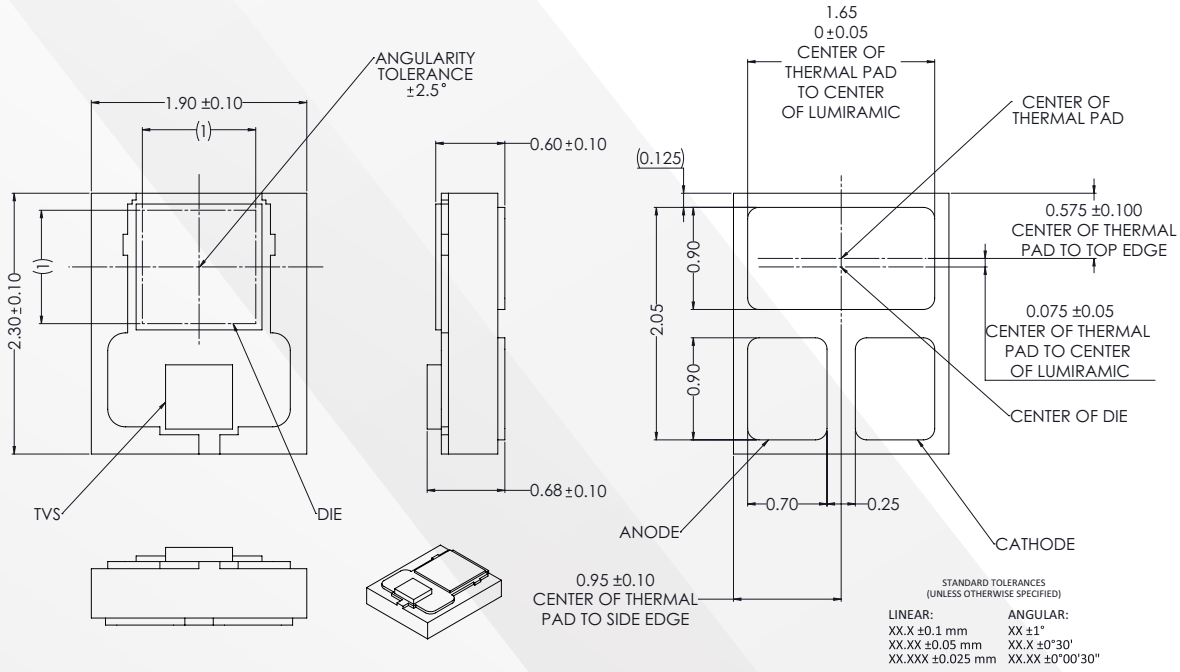
- Backup/Reverse
- Daytime Running Lights
- License Plate

LUXEON F Cool White Absolute Ratings.

PARAMETER	PERFORMANCE
Minimum DC Forward Current	50mA
Maximum DC Forward Current	1000mA
Maximum Junction Temperature [1]	150°C
Operating Case Temperature at 700mA [1]	-40°C to 130°C
Operating Case Temperature at Maximum Current [1]	-40°C to 105°C
LED Storage Temperature	-40°C to 130°C
Maximum Soldering Temperature	260°C
Allowable Reflow Cycles	3
ESD Sensitivity [2]	±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:
1. 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.
2. Measured using human body model (per JESD22 A114), machine model (per JESD22 A115 and charged device model (per JESD22 C101).

Mechanical Dimensions.



Notes:
1. Drawings are not scale.
2. All dimensions are in millimeters.