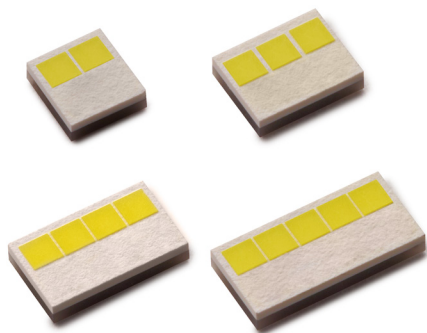




LUXEON Altilon SMD

Automotive forward lighting source



LUXEON Altilon SMD is specifically designed and tested to meet and exceed expectations for reliability, performance, and lifetime in automotive forward lighting applications. It is designed to be assembled with industry standard soldering reflow lines simplifying system integration and lowering assembly costs. LUXEON Altilon SMD provides industry-best thermal performance in LED forward lighting applications, meeting both SAE and ECE color specifications with finer granularity than existing systems. PPAP documentation is available upon request. All LUXEON Altilon SMD LEDs are IEC-60810 qualified.

FEATURES AND BENEFITS

- Higher drive current capability for increased flux performance
- Low thermal resistance and power consumption results in simplified thermal management and system cost
- High flux output provides flexibility in styling and optical design
- Surface mount device to reduce overall costs

PRIMARY APPLICATIONS

- Adaptive Lighting
 - AFS
- Daytime Running Lights
- Front Fog
- Headlight
 - Low Beam
 - High Beam
 - Static Bending Lights

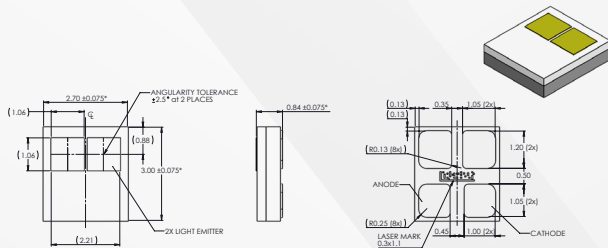
LUXEON Altilon SMD Absolute Ratings.

PARAMETER	PERFORMANCE			
	1x2	1x3	1x4	1x5
Minimum DC Forward Current	100mA			
Maximum DC Forward Current	1500mA			
Operating Case Temperature at 700mA ^[1,2]	-40°C to 130°C			
Maximum Junction Temperature ^[1,2]	150°C			
Operating Case Temperature at Maximum Current	-40°C to 125°C			
Maximum Junction Temperature for Short Time Applications ^[3]	175°C			
Maximum V_f at 1500mA & -40°C ^[1,2]	7.8	11.6	15.4	19.3
Minimum V_f at 1500mA & 150°C	5.5	8.1	11.0	13.6
LED Storage Temperature	-40°C to 130°C			
Soldering Temperature	JEDEC 020c 260°C			
Allowable Reflow Cycles	2			
ESD Sensitivity ^[4]	8kV HBM, 2kV CDM, 400V MM			
Reverse Voltage ($V_{reverse}$)	LUXEON Altilon SMD LEDs are not designed to be driven in reverse bias			

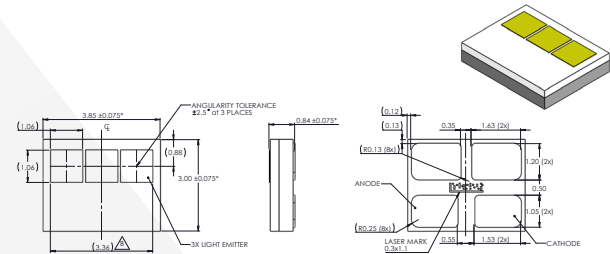
Notes for Table 3:

- 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 Altilon SMD LEDs driven at or above the maximum rated operating case temperature may have shorter lifetime.
- Please consult with Lumileds for more information on maximum time durations and forward currents for these temperatures.
- Short time operations of less than 200hrs.
- Measured using human body model (per JESD22 A114), machine model (per JESD22 A115) and charged device model (per JESD22 C101).

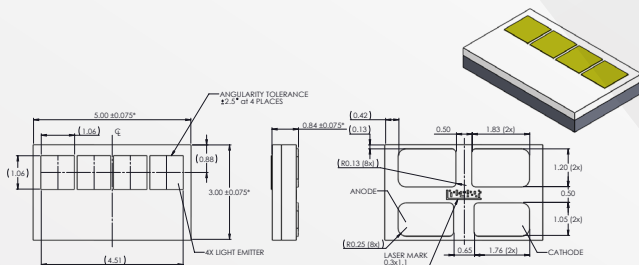
Mechanical dimensions for LUXEON Altilon SMD 1x2.



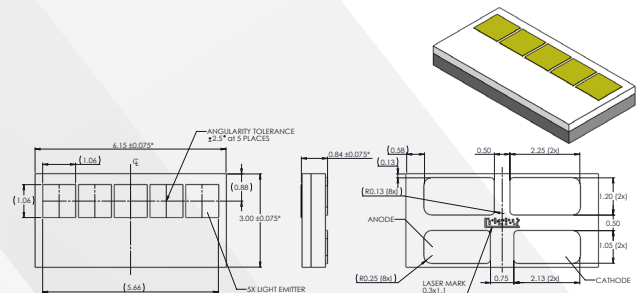
Mechanical dimensions for LUXEON Altilon SMD 1x3.



Mechanical dimensions for LUXEON Altilon SMD 1x4.



Mechanical dimensions for LUXEON Altilon SMD 1x5.



Notes:

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

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