



LUXEON Altilon

Functional solution for forward lighting systems



LUXEON Altilon delivers distinctive brilliant white light for your automotive forward lighting designs. LUXEON Altilon is designed and tested to withstand extreme temperatures and engineered to simplify optical design and ease of manufacturing and assembly. With advanced phosphor technology, LUXEON Altilon that meets both SAE and ECE color specifications and provides finer granularity than existing systems.

FEATURES AND BENEFITS

- 1A drive current enables high light output per package for reduced LED count
- 150°C maximum case temperature, T_c , ensures application performance at extreme conditions
- Industry's lowest thermal resistance enables smaller heatsinks for smaller designs
- 1x2 and 1x4 configuration options with or without spade lugs for design flexibility
- AEC-Q101C qualified and PPAP documentation available

PRIMARY APPLICATIONS

- Adaptive Lighting
- Daytime Running Lights
 - Front Position
- Front Fog
- Headlight
 - Cornering Light
 - High Beam
 - Low Beam

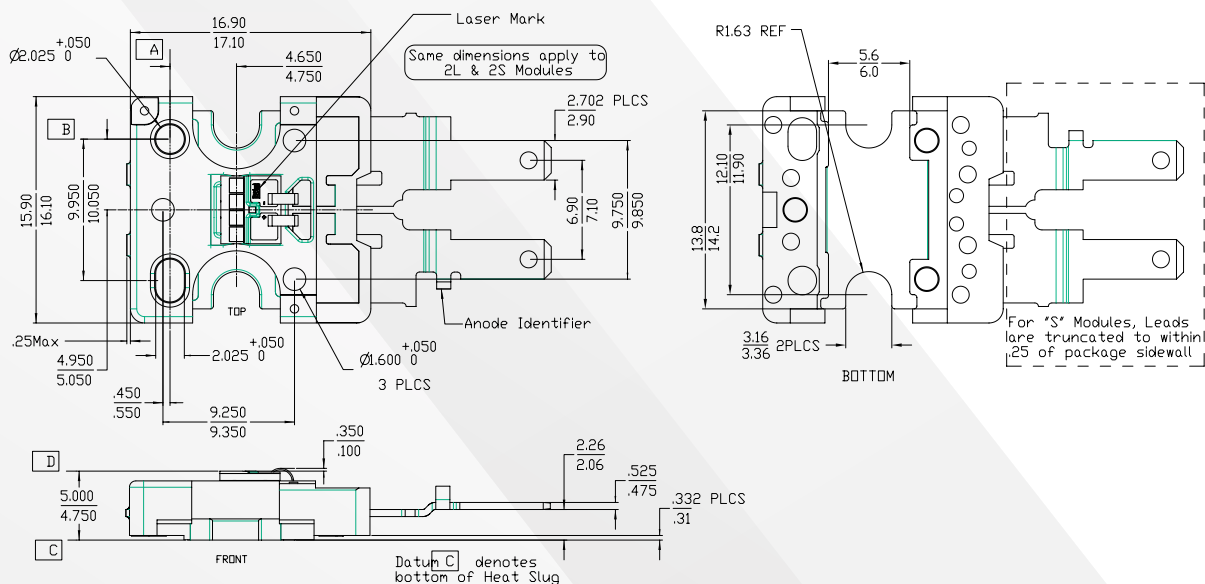
LUXEON Altilon Absolute Ratings.

PARAMETER	PERFORMANCE
Minimum DC Forward Current ^[1]	100mA
Maximum DC Forward Current ^[1]	1100mA
Maximum Transient Peak Current	1500mA for ≤10ms
Maximum Forward Voltage at 1000mA and -40°C ^[2]	15.8V (1x4) 7.9V (1x2)
Maximum Forward Voltage at 1000mA and 130°C ^[3]	10.0V (1x4) 5.0V (1x2)
Maximum AC Ripple	≤50mA rms at ≥10kHz
ESD Sensitivity ^[4]	8kV HBM, 2kV CDM, 400V MM
Storage Temperature	-40°C to 130°C
Minimum Operating Case Temperature	-40°C
Maximum Case Temperature (1000mA) ^[5]	130°C
Maximum Allowable Solder Pad Temperature	270°C/30 seconds maximum

Notes:

- Although no damage to the device will occur, driving these high power LEDs at drive currents below 350mA or above 1000mA may result in unpredictable performance. Please consult your Lumileds sales representative for further information.
- Product forward voltage at 1000mA operation, case temperature -40°C after 1,000 hours of operation at related conditions.
- Product forward voltage at 1000mA operation, case temperature 130°C after 1,000 hours of operation at related conditions.
- Measured using human body model, contact discharge method and machine model per AEC-Q101C.
- Maximum case temperature for short term operation only. See section on reliability expectation and thermal design requirements for recommendations on maximum case temperature to ensure life of vehicle performance.

Mechanical Dimensions for LUXEON Altilon.



Notes:

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

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