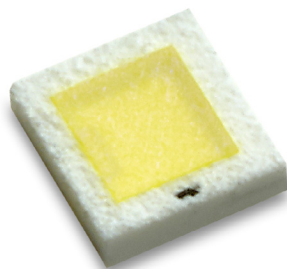




LUXEON Neo 0.5mm²

Industry-leading solutions for matrix head-lighting



LUXEON Neo LEDs, with their miniaturized form factor and low mechanical tolerances, are the ideal LED components for matrix head-lighting. All LUXEON Neo LEDs are hot binned at 85°C and IEC 60810 qualified.

FEATURES AND BENEFITS

- Higher drive current capability for increased flux performance
- Low thermal resistance for better hot lumen performance
- Miniaturized package for dense population of boards
- Hot binned at 85°C monopulse (MP) to match closer to operating conditions
- IEC/PAS 62707-1 White LED

PRIMARY APPLICATIONS

- Adaptive Lighting
 - AFS
- Headlight
 - Low Beam
 - High Beam

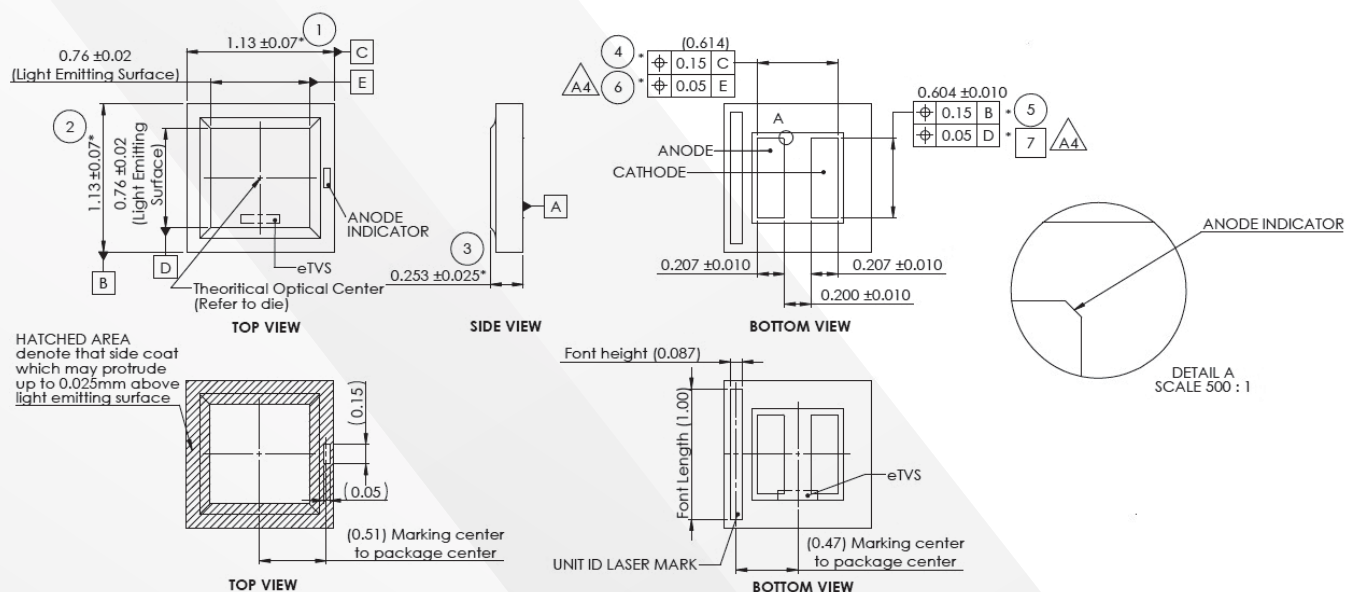
LUXEON Neo 0.5mm² Absolute Ratings.

PARAMETER	PERFORMANCE
Minimum DC Forward Current	25mA
Maximum DC Forward Current	750mA
Maximum Junction Temperature ^[1]	150°C
Operating Case Temperature at Test Current ^[1]	-40°C to 125°C
Operating Case Temperature at Maximum Current ^[1]	-40°C to 125°C
LED Storage Temperature	-40°C to 130°C
Soldering Temperature	260°C
Allowable Reflow Cycles	3
ESD Sensitivity ^[2]	±2 kV HBM, ±200V MM, ±500 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 used to maintain junction temperature below the maximum. LUXEON Neo LEDs driven at or above maximum LED case temperature may have shorter lifetime.
- Measured using human body model (per JEDEC22 A114), machine model (per JEDEC22 A115) and charged device model (per JEDEC22 C101).

Mechanical Dimensions.



Notes:

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