

Infrared (IR) Starboards

Industry Leading High Powered LED Starboards

Data Sheet

Version 1.0

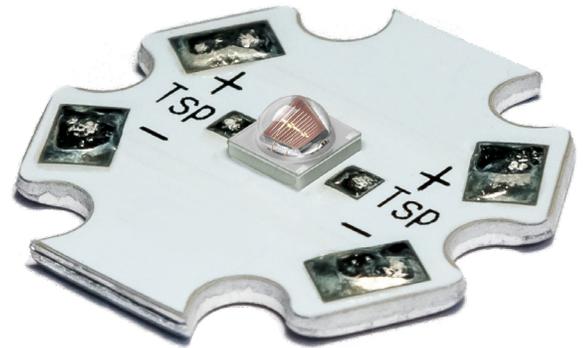
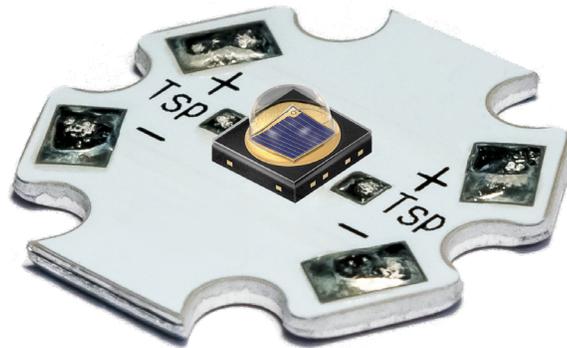
Lean & Fast. Made Smarter.

Superior Performance – Stay current with the highest intensity LEDs

Design Faster – Use industry standard starboards to shorten development time

Maximum Flexibility – Design to your exact specifications using the full spectrum of NewEnergy starboards

Rapid Innovation – Work with NewEnergy on your custom solution



Primary Applications



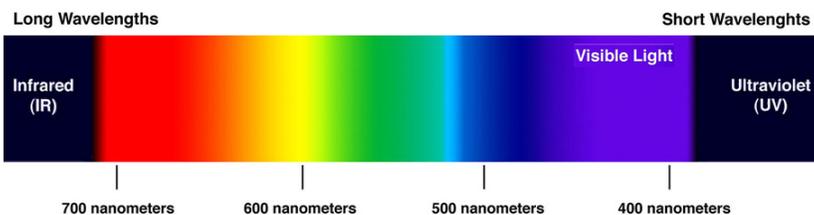
Surveillance Systems
License Plate Scanning
Automotive Sensing



Machine Vision
Night Vision
Eye Tracking Systems

Superior Performance with Flexible Options

- Evaluate the latest LEDs from top manufacturers
- Multiple infrared wavelength options
- Choose the proper beam angle for your application
- Prototype faster, test multiple options



Custom Solutions

NewEnergy operates facilities globally with ISO certifications for the LED lighting, automotive and medical industries. Our North Carolina based office provides quick engineering & sales support with an R&D lab for prototype development and custom solutions. Our in-house global manufacturing capabilities allow for both building in the United States as well as overseas at scale.

About NewEnergy

NewEnergy accelerates the adoption of LED technology through simple, modular products and custom designs. Through 30 years of experience, state of the art manufacturing, full traceability and advanced quality controls, NewEnergy offers leading solid state lighting components, modules and custom solutions. NewEnergy customers get to market faster, with less resources, at lower costs. Visit new-energyllc.com for more information.

Luminus Infrared (IR) Starboards

Product Selection Guide

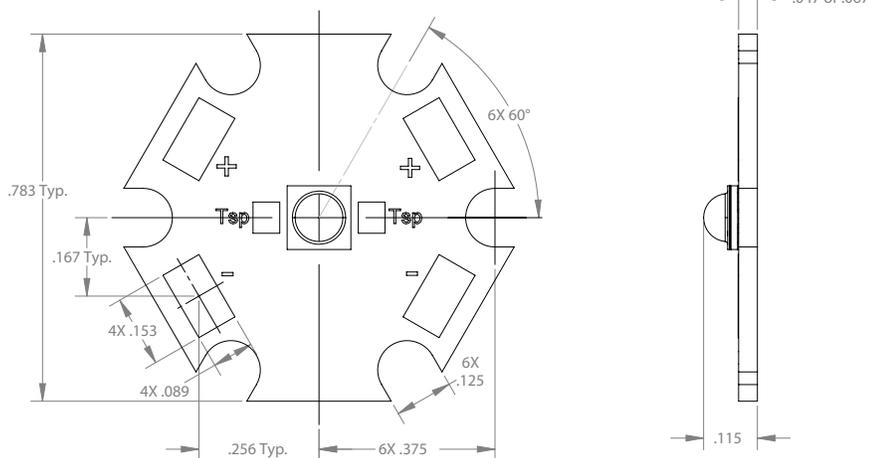
Color	Part Number	Description	Beam Angle	Dominant Wavelength	Vf	Flux (mW)
					@ 350mA, Tj 25C	
Infrared 850nm to 940nm	LST1-01G01-IR01-00	Starboard, Luminus SST-10-IR-B130, 850nm Infrared	130°	850nm	1.5	280
	LST1-01G01-IR02-00	Starboard, Luminus SST-10-IR-B90, 850nm Infrared	90°	850nm	1.5	280
	LST1-01G01-IR03-00	Starboard, Luminus SST-10-IR-B130, 940nm Infrared	130°	940nm	1.4	225
	LST1-01G01-IR04-00	Starboard, Luminus SST-10-IR-B90, 940nm Infrared	90°	940nm	1.4	225
Far Red 730nm	LST1-01G01-FRD1-00	Starboard, Luminus SST-10-FR-B130, 730nm Far Red	130°	730nm	2.1	310

All values shown above are typical.
Do not look into the light that is emitting from these LEDs as it is harmful to the human eye.
Eye injury may result. Use skin and eye protection as necessary.
Other beam angles and colors available upon request.

Maximum Ratings

Part Number	DC Current (A)	Tsp Temp (°C)	Power (W)
LST1-01G01-IR0x	1.5	105	3
LST1-01G01-FRD1	1.5	105	3

Dimensions (Units:Inches)



These devices emit highly concentrated non-visible infrared light which can be hazardous to the human eye in certain circumstances. When incorporating these devices into a product be sure to follow the safety precautions given in IEC 60825-1 and IEC 62471.

OSRAM Oslon Black Infrared (IR) Starboards

Product Selection Guide

Color	Part Number	Description	Beam Angle	Centroid Wavelength	Vf	Flux (mW)
Infrared 850nm to 940nm	LST1-01F09-IR01-00	Starboard, Osram OSOLON Black, 850nm Infrared	150°	850nm	3.2 ⁽¹⁾	1270 ⁽¹⁾
	LST1-01F09-IR02-00	Starboard, Osram OSOLON Black, 850nm Infrared	90°	850nm	3.2 ⁽¹⁾	1340 ⁽¹⁾
	LST1-01F09-IR03-00	Starboard, Osram OSOLON Black, 940nm Infrared	150°	940nm	2.75 ⁽¹⁾	970 ⁽¹⁾
	LST1-01F09-IR04-00	Starboard, Osram OSOLON Black, 940nm Infrared	90°	940nm	2.75 ⁽¹⁾	970 ⁽¹⁾
Far Red 735nm	LST1-01F06-FRD1-00	Starboard, Osram OSOLON SSL 120, 735nm Far Red	120°	735nm	1.85 ⁽²⁾	282 ⁽²⁾

⁽¹⁾Vf and flux values @ 1.0A, tp 10ms, T_A 25C

⁽²⁾Vf and flux values @ 350mA, T_j 25C

All values shown above are typical.

Do not look into the light that is emitting from these LEDs as it is harmful to the human eye.

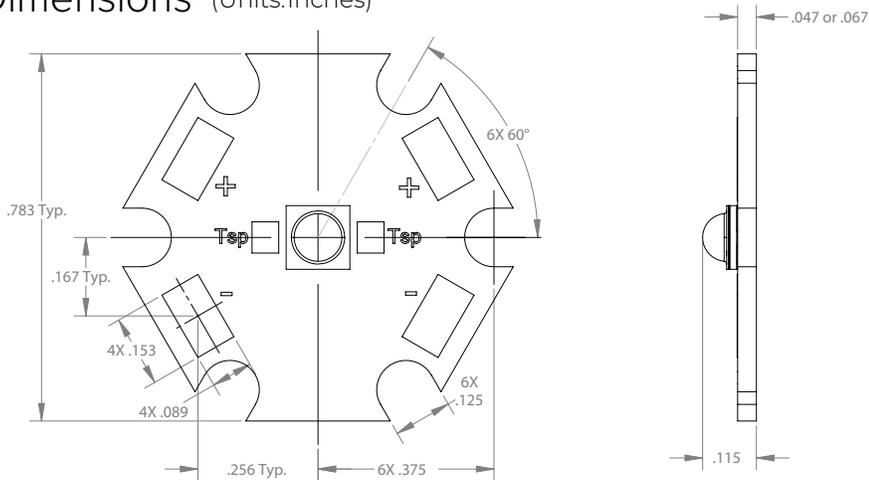
Eye injury may result. Use skin and eye protection as necessary.

Other beam angles and colors available upon request.

Maximum Ratings

Part Number	DC Current (A)	Tsp Temp (°C)	Power (W)
LST1-01F09-IR01, LST1-01F09-IR02	1.5	105	5.8
LST1-01F09-IR03, LST1-01F09-IR04	1.0	105	3.4
LST1-01F06-FRD1	1.0	105	2.3

Dimensions (Units:Inches)



These devices emit highly concentrated non-visible infrared light which can be hazardous to the human eye in certain circumstances. When incorporating these devices into a product be sure to follow the safety precautions given in IEC 60825-1 and IEC 62471.