

Cree LED High Powered XHP50.3 LED Starboards

Industry Leading High Powered Starboards

Data Sheet

Version 2.2

Lean & Fast. Made Smarter.

Superior Performance – Stay current with the state of the art in LED technology.

Design Faster – Industry standard starboards shorten development time.

Maximum Flexibility – Design to your exact specifications using NewEnergy starboards.

Rapid Innovation – Work with NewEnergy to develop your custom solutions.

Primary Applications

Architectural
Commercial
Retail
Horticulture
Residential
Torch

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 a 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.

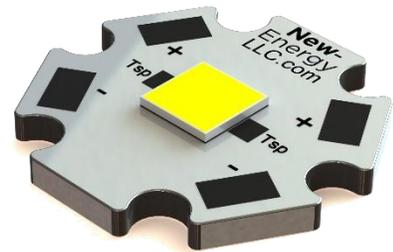
Features and Benefits

- LST1-01C57-AAAA-BB features Cree LEDs [XHP50.3 High Density high power LED](#).
- LST1-01C58-AAAA-BB features Cree LEDs [XHP50.3 High Intensity high power LED](#).
- Assembled in the United States.
- 1.7mm aluminum standard. Additional thicknesses and copper available. Consult factory.
- Assemblies are light-up tested before packaging.
- Voltage (VDC) and current (mA) characterizations sweeps available through NIST traceable sphere, consult factory.
- Additional CCTs, CRIs and flux values available, consult factory.
- Additional placements and dimensional PCBA options available. Give us a call or send us your sketch or gerber files for a quote.

Info@New-EnergyLLC.com



LST1-01C57-aaaa-bb
XHP50.3 HD



LST1-01C58-aaaa-bb
XHP50.3 HI

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. Contact us at Info@New-EnergyLLC.com



WARNING

Do not look at an exposed lamp in operation. Eye injury can result. For more information about LEDs and eye safety, please refer to the Cree LED, Eye Safety Application Note.

Cree LED High Power XHP50.3 High Density Starboards

NewEnergy Standard Part Number Table

NewEnergy Star Board Part Number	Beam Angle (°)	Color	CRI	Minimum Flux ⁽¹⁾ (lm)	Maximum Flux (lm)	Typical Forward Voltage (Vf)	Typical Watts ⁽¹⁾ (W)
LST1-01C57-7070-01	120	7000	70	1120	2050	11.2	12.4
LST1-01C57-7080-01	120	7000	80	1040	1903	11.2	12.4
LST1-01C57-6570-01	120	6500	70	1120	2050	11.2	12.4
LST1-01C57-6580-01	120	6500	80	1040	1903	11.2	12.4
LST1-01C57-6070-01	120	6000	70	1120	2050	11.2	12.4
LST1-01C57-6080-01	120	6000	80	1040	1903	11.2	12.4
LST1-01C57-6090-01	120	6000	90	900	1647	11.2	12.4
LST1-01C57-5770-01	120	5700	70	1120	2050	11.2	12.4
LST1-01C57-5780-01	120	5700	80	1040	1903	11.2	12.4
LST1-01C57-5790-01	120	5700	90	900	1647	11.2	12.4
LST1-01C57-5070-51	120	5000	70	1120	2050	11.2	12.4
LST1-01C57-5080-31	120	5000	80	1040	1903	11.2	12.4
LST1-01C57-5090-31	120	5000	90	900	1647	11.2	12.4
LST1-01C57-4570-51	120	4500	70	1120	2050	11.2	12.4
LST1-01C57-4580-31	120	4500	80	1040	1903	11.2	12.4
LST1-01C57-4590-31	120	4500	90	900	1647	11.2	12.4
LST1-01C57-4070-51	120	4000	70	1120	2050	11.2	12.4
LST1-01C57-4080-31	120	4000	80	1040	1903	11.2	12.4
LST1-01C57-4090-31	120	4000	90	900	1647	11.2	12.4
LST1-01C57-3570-51	120	3500	70	1120	2050	11.2	12.4
LST1-01C57-3580-31	120	3500	80	970	1775	11.2	12.4
LST1-01C57-3590-31	120	3500	90	840	1537	11.2	12.4
LST1-01C57-3070-51	120	3000	70	1040	1903	11.2	12.4
LST1-01C57-3080-31	120	3000	80	970	1775	11.2	12.4
LST1-01C57-3090-31	120	3000	90	840	1537	11.2	12.4
LST1-01C57-2780-31	120	2700	80	900	1647	11.2	12.4
LST1-01C57-2790-31	120	2700	90	780	1427	11.2	12.4
LST1-01C57-2270-51	120	2200	70	900	1647	11.2	12.4

⁽¹⁾Flux and wattage values specified at 12 V, 700mA, Tj 85 °C

All values shown above are typical unless noted.

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.

See Cree LED – [Eye Safety Application Note](#)

Cree LED High Power XHP50.3 High Intensity Starboards

NewEnergy Standard Part Number Table

NewEnergy Star Board Part Number	Beam Angle (°)	Color	CRI	Minimum Flux ⁽¹⁾ (mW)	Maximum Flux (mW)	Typical Forward Voltage (Vf)	Typical Watts ⁽¹⁾ (W)
LST1-01C58-7070-01	120	7000	70	1040	1903	11.2	7.8
LST1-01C58-7080-01	120	7000	80	970	1775	11.2	7.8
LST1-01C58-6570-01	120	6500	70	1040	1903	11.2	7.8
LST1-01C58-6580-01	120	6500	80	970	1720	11.2	7.8
LST1-01C58-6070-01	120	6000	70	1040	1903	11.2	7.8
LST1-01C58-6080-01	120	6000	80	970	1775	11.2	7.8
LST1-01C58-6090-01	120	6000	90	840	1537	11.2	7.8
LST1-01C58-5770-01	120	5700	70	1040	1903	11.2	7.8
LST1-01C58-5780-01	120	5700	80	970	1775	11.2	7.8
LST1-01C58-5790-01	120	5700	90	840	1537	11.2	7.8
LST1-01C58-5070-51	120	5000	70	1040	1903	11.2	7.8
LST1-01C58-5080-31	120	5000	80	970	1775	11.2	7.8
LST1-01C58-5090-31	120	5000	90	840	1537	11.2	7.8
LST1-01C58-4570-51	120	4500	70	1040	1903	11.2	7.8
LST1-01C58-4580-31	120	4500	80	970	1775	11.2	7.8
LST1-01C58-4590-31	120	4500	90	840	1537	11.2	7.8
LST1-01C58-4070-51	120	4000	70	1040	1903	11.2	7.8
LST1-01C58-4080-31	120	4000	80	970	1775	11.2	7.8
LST1-01C58-4090-31	120	4000	90	840	1537	11.2	7.8
LST1-01C58-4095-31	120	4000	95	780	1427	11.2	7.8
LST1-01C58-3570-51	120	3500	70	1040	1903	11.2	7.8
LST1-01C58-3580-31	120	3500	80	900	1647	11.2	7.8
LST1-01C58-3590-31	120	3500	90	780	1427	11.2	7.8
LST1-01C58-3595-31	120	3500	95	680	1244	11.2	7.8
LST1-01C58-3070-51	120	3000	70	970	1775	11.2	7.8
LST1-01C58-3080-31	120	3000	80	900	1647	11.2	7.8
LST1-01C58-3090-31	120	3000	90	780	1427	11.2	7.8
LST1-01C58-3095-31	120	3000	95	680	1244	11.2	7.8
LST1-01C58-2780-31	120	2700	80	900	1647	11.2	7.8
LST1-01C58-2790-31	120	2700	90	730	1336	11.2	7.8
LST1-01C58-2795-31	120	2700	95	680	1244	11.2	7.8

⁽¹⁾Flux and wattage values specified at 12 V, 700mA, Tj 85 °C

All values shown above are typical unless noted.

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.

See Cree LED – [Eye Safety Application Note](#)

Cree LED High Power XHP50.3 TLCI Broadcast Starboards

NewEnergy Standard Part Number Table

NewEnergy Star Board Part Number	Beam Angle (°)	Color	CRI	Minimum Flux (mW) ⁽¹⁾	Maximum Flux (mW) ⁽¹⁾	Typical Forward Voltage (Vf)	Typical Watts (W)
LST1-01C57-T57U-01	120	5700	90	900	1620	11.2	7.84
LST1-01C57-T57Z-01	120	5700	95	840	1512	11.2	7.84
LST1-01C58-T57U-01	120	5700	90	840	1512	11.2	7.84
LST1-01C58-T57Z-01	120	5700	95	780	1404	11.2	7.84

Maximum Ratings

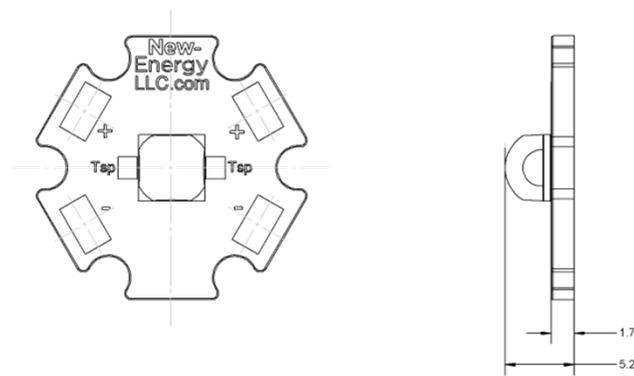
Part Number	DC Current (mA)	Forward Voltage (V)	Tsp Temp (°C)	Power (W)
LST1-01C5n-aaaa-bb	1500	12.4	105	18.6

Dimensions

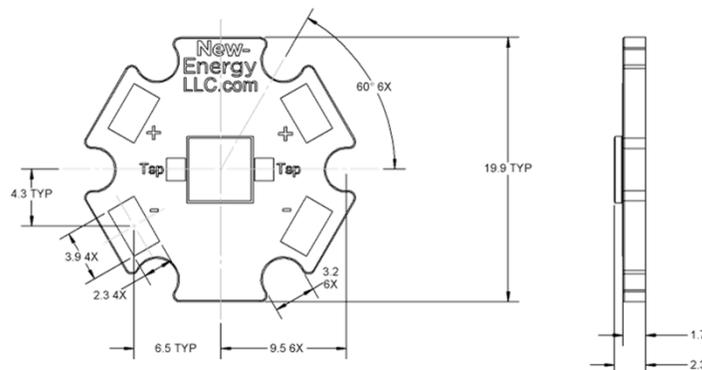
Units: mm

DO NOT SCALE DRAWING

LST1-01C57-aaaa-bb
XHP50.3 HD



LST1-01C58-aaaa-bb
XHP50.3 HI



Last Modified: 11MAR26