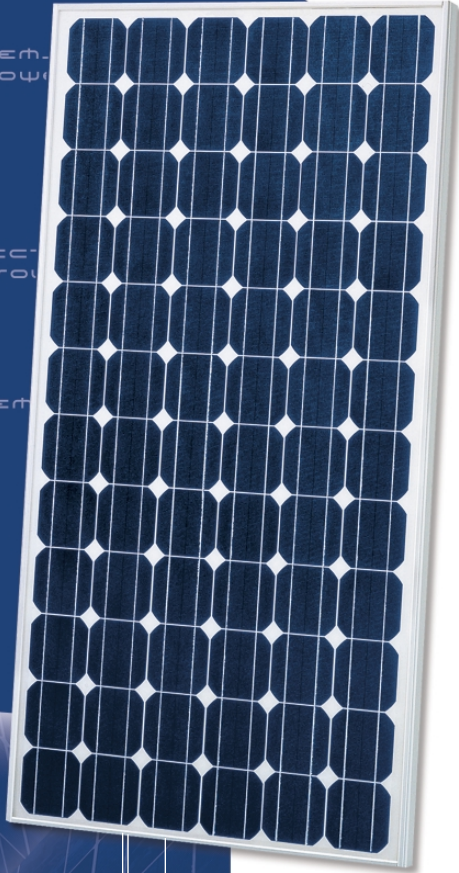


185 WATT



FEATURES

High-power module (185W) using 125mm square single crystal silicon solar cells with 14.2% module conversion efficiency.

Photovoltaic module with bypass diode minimizes the power drop caused by shade.

Textured cell surface to reduce the reflection of sunlight and BSF (Back Surface Field) structure to improve cell conversion efficiency: 17.5%.

White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use.

Nominal 24 DC output, perfect for grid connected systems

Output terminal: Lead wire with waterproof connector

Certifications: UL1703, cUL

Sharp modules are built in ISO 9001 facilities.

BIG POWER, SMALL FOOTPRINT

SINGLE CRYSTAL SILICON PHOTOVOLTAIC MODULE WITH 185W MAXIMUM POWER

This single crystal 185 watt module features 17.5% encapsulated cell efficiency and 14.2% module efficiency - the highest efficiency commercially available! Using breakthrough technology perfected in Sharp's space cell program, the NT-S5E1U module allows for maximum usable power per square foot of solar array.

A safe, clean, reliable source of energy, Sharp's NT-S5E1U photovoltaic module is designed for large electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for grid connected systems.

Common applications for the Sharp NT-S5E1U include residences, office buildings, solar power stations, solar villages, radio relay stations, beacons and traffic lights. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

NT-S5E1U – MAXIMUM POWER

ELECTRICAL CHARACTERISTICS

| | |
|---|------------------------------------|
| Cell | Single crystal silicon solar cells |
| No. of Cells and Connections | 72 in series |
| Open Circuit Voltage (Voc) | 44.9 |
| Maximum Power Voltage (Vpm) | 36.2 |
| Short Circuit Current (Isc) | 5.75 |
| Maximum Power Current (Ipm) | 5.11 |
| Maximum Power (Pm) ¹ | 185.0 |
| Encapsulated Solar Cell Efficiency (ηc) | 17.5 |
| Module Efficiency (ηm) | 14.2 |
| PTC Rating (W) ² | 162.43 |
| Maximum System Voltage | DC 600V |
| Series Fuse Rating | 10A |
| Type of Output Terminal | Lead Wire with MC Connector |

MECHANICAL CHARACTERISTICS

| | |
|-----------------------------------|---|
| Dimensions (A x B x C below) | 1575 x 826 x 46mm / 62.01 x 32.52 x 1.81" |
| Weight | 17.0kg/37.485lbs |
| Packing Condition | 2 pcs - 1 Carton |
| Size of Carton | 1700 x 970 x 130mm/66.93 x 38.19 x 5.122" |
| Loading Capacity (20ft container) | 168 pcs - 84 carton |
| Loading Capacity (40ft container) | 392 pcs - 196 carton |

ABSOLUTE MAXIMUM RATINGS

| Parameters | Rating | Unit |
|------------------------------|------------|------|
| Operating Temperature | -40 to +90 | °C |
| Storage Temperature | -40 to +90 | °C |
| Dielectric Voltage Withstood | 2200 max. | V-DC |

IV CURVES

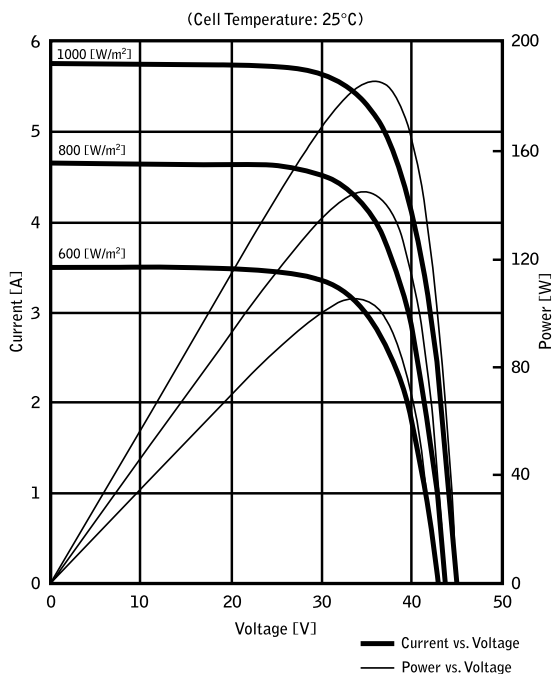
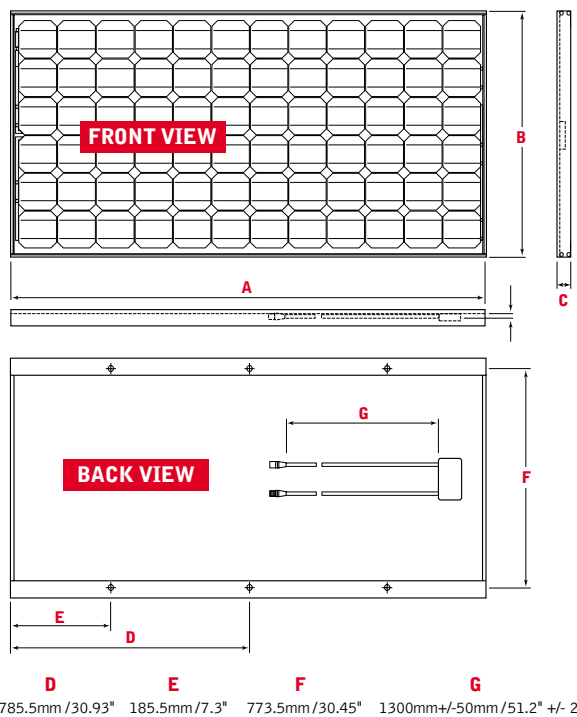


Fig. 1-2 Current, Power vs. Voltage Characteristics

DIMENSIONS



Specifications are subject to change without notice.

¹ (STC) Standard Test Conditions: 25°C, 1 kW/m², AM 1.5

² (PTC) Pacific Test Conditions: 1 kW/m², AM 1.5, 20°C, 1 m/s wind speed

In the absence of confirmation by device specifications sheets, Sharp takes no responsibility for any defects that may occur in equipment using any Sharp devices shown in catalogs, data books, etc. Contact Sharp in order to obtain the latest device specification sheets before using any Sharp device. ©2002 Sharp Electronics Corporation



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