

80 WATT

**DESIGNED FOR
LARGE ELECTRICAL
POWER REQUIREMENTS**

FEATURES

- High-power module (80W) using 125.5mm square polycrystalline silicon solar cells with 12.60% module conversion efficiency
- Photovoltaic module with bypass diode minimises the power drop caused by shade
- Anti reflection coating and BSF (Back Surface Field) structure to improve cell conversion efficiency: 14.0%
- White tempered glass, EVA resin and a weatherproof film, plus aluminum frame for extended outdoor use
- Nominal 12 volt output for battery charging applications
- Output terminal: Lead wire with waterproof connector
- Certifications: IEC 61215
- SHARP modules are manufactured in ISO 9001 certified factories

POLYCRYSTALLINE SILICON PHOTOVOLTAIC MODULE WITH 80W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's **NE-80E2E** photovoltaic module is designed for a variety of electrical power requirements. Based on the technology of crystal silicon solar cells developed over 45 years, this module has superb durability to withstand rigorous operating conditions and is suitable for use in most solar systems.

Common applications for the Sharp NE-80E2E include office buildings, private residences, RVs, cabins, vacation homes, solar power stations, pumps, beacons and lighting equipment. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

SHARP

NE-80E2E – MULTI-PURPOSE MODULE

ELECTRICAL CHARACTERISTICS

Cell	polycrystalline silicon, 125.5mm
No. of Cells and Connections	36 in series
Open Circuit Voltage (Voc)	21.3 V
Maximum Power Voltage (Vpm)	17.1 V
Short Circuit Current (Isc)	5.31 A
Maximum Power Current (Ipm)	4.67 A
Maximum Power (Minimum Power) (Pm) ¹	80 W (76W)
Encapsulated Solar Cell Efficiency (ηc)	14.0 %
Module Efficiency (ηm)	12.60 %
Maximum System Voltage	DC 540V
Series Fuse Rating	10A
Type of Output Terminal	Lead wire with connector

Specifications are subject to change without notice
¹ (STC) Standard Test Conditions: 25°C, 1 kW/m², AM 1.5

MECHANICAL CHARACTERISTICS

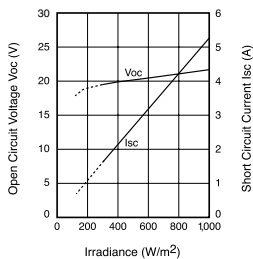
Dimensions	1200 x 530 x 35 mm
Weight	8.5kg
Packing Condition	1 pcs per Carton
Size of Carton	1350 x 700 x 110 mm

ABSOLUTE MAXIMUM RATINGS

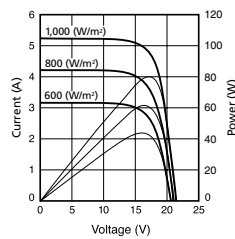
Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 V DC max.	V-DC

IV CURVES

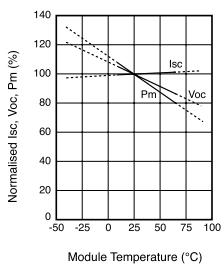
Open Circuit Voltage, Short Circuit Current vs. Irradiance Characteristics (Module temperature: 25°C)



Current, Power vs. Voltage Characteristics (Module temperature: 25°C)

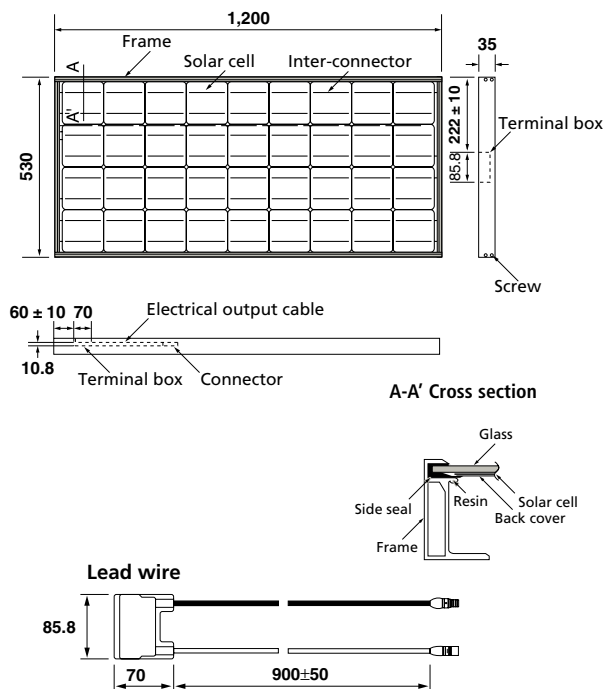


Normalised Isc, Voc, Pm vs. Module Temperature Characteristics



Specifications are subject to change without notice

DIMENSIONS



Specifications are subject to change without notice

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 catalogues, data books, etc. Contact Sharp in order to obtain the latest device specification sheets before using any Sharp device.

