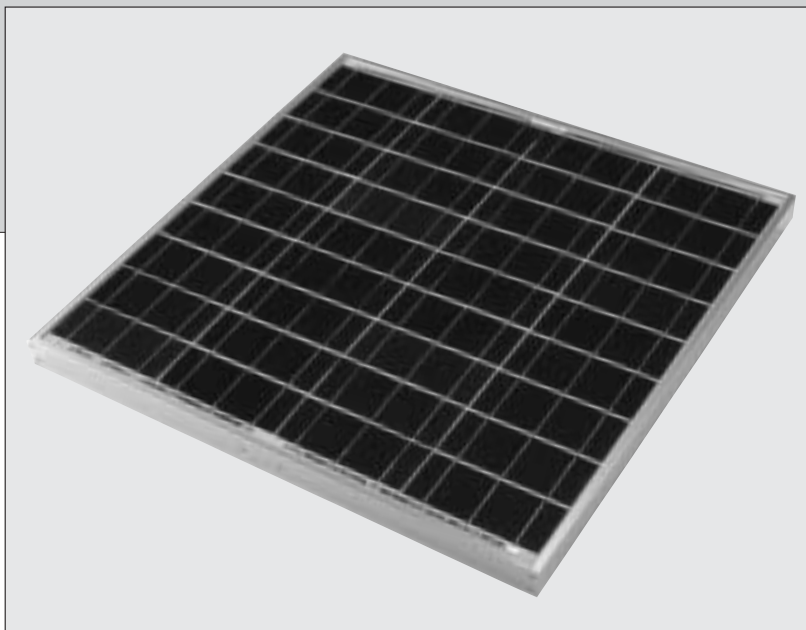


THE NEW VALUE FRONTIER



KC50T

HIGH EFFICIENCY MULTICRYSTAL PHOTOVOLTAIC MODULE



HIGHLIGHTS OF KYOCERA PHOTOVOLTAIC MODULES

Kyocera's advanced cell processing technology and automated production facilities produce a highly efficient multicrystal photovoltaic modules. The conversion efficiency of the Kyocera solar cell is over 16%. These cells are encapsulated between a tempered glass cover and a pottant with back sheet to provide efficient protection from the severest environmental conditions. The entire laminate is installed in an anodized aluminum frame to provide structural strength and ease of installation.

APPLICATIONS

- Microwave/Radio repeater stations
- Electrification of villages in remote areas
- Medical facilities in rural areas
- Power source for summer vacation homes
- Emergency communication systems
- Water quality and environmental data monitoring systems
- Navigation lighthouses, and ocean buoys
- Pumping systems for irrigation, rural water supplies and livestock watering
- Aviation obstruction lights
- Cathodic protection systems
- Desalination systems
- Recreational vehicles
- Railroad signals
- Sailboat charging systems

QUALIFICATIONS

■ **MODULE**

UL1703 certified
Hazardous Locations Class I, Div 2, Groups A, B, C and D

■ **FACTORY**

ISO9001 and ISO14001

PERFORMANCE WARRANTY

1 year limited warranty on material and workmanship
25 year* limited warranty on power output

SPECIFICATIONS

■ **Electrical Specifications**

MODEL	KC50T
Maximum Power	54Watts
Tolerance	+15% / -5%
Maximum Power Voltage	17.4Volts
Maximum Power Current	3.11Amps
Open Circuit Voltage	21.7Volts
Short-Circuit Current	3.31Amps
Length	639mm (25.2in.)
Width	652mm (25.7in.)
Depth	54mm (2.1in.)
Weight	5.0kg (11.0lbs.)

■ **Thermal parameters**

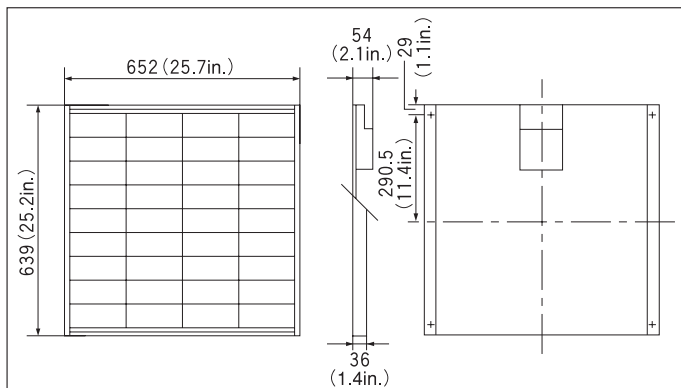
Nominal Operating Cell Temperature	47°C
Isc Current temperature coefficient	(1.33 × 10 ⁻³) A/°C
Voc Voltage temperature coefficient	(-8.21 × 10 ⁻²) V/°C

Note: The electrical specifications are under test conditions of Irradiance of 1kW/m², Spectrum of 1.5 air mass and cell temperature of 25°C

Kyocera reserves the right to modify these specifications without notice.

■ **Physical Specifications**

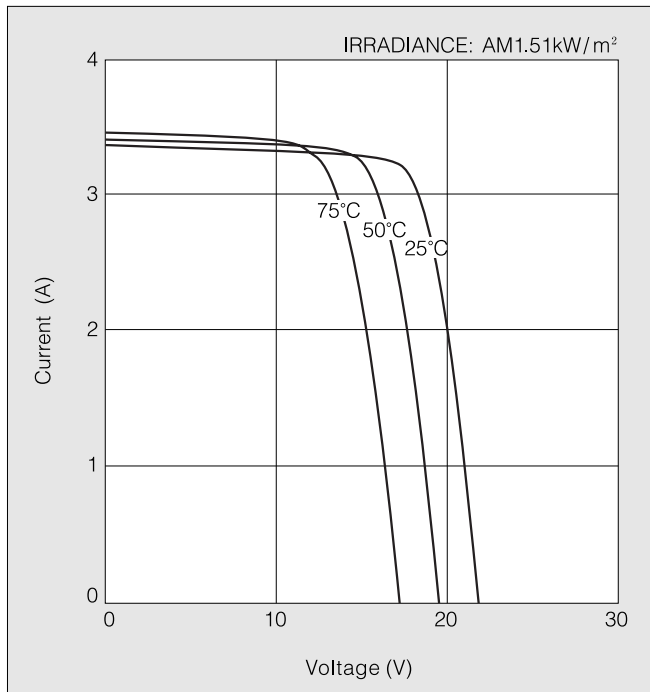
(Unit: mm)



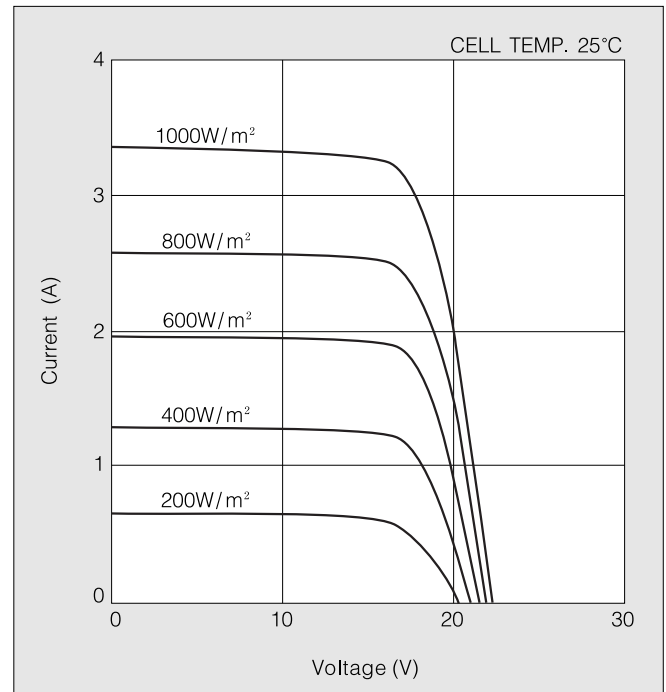
※(Long term output warranty shall guarantee that loss of output is not more than 10% of the minimum warranty value of the product specifications within 12 years and is not more than 20% within 25 years after the purchase of the product by customer. The output values shall be those measured under Kyocera standard measurement conditions. Regarding the warranty conditions in detail, please refer to Warranty issued by Kyocera.)

ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics of Photovoltaic Module KC50T at various cell temperatures



Current-Voltage characteristics of Photovoltaic Module KC50T at various irradiance levels



QUALITY ASSURANCE

Kyocera multicrystal photovoltaic modules have passed the following tests.

- Thermal cycling test
- Thermal shock test
- Thermal/ Freezing and high humidity cycling test
- Electrical isolation test
- Hail impact test
- Mechanical, wind and twist loading test
- Salt mist test
- Light and water-exposure test
- Field exposure test

Please contact our office to obtain details without hesitation.



KYOCERA Corporation

■ KYOCERA Corporation Headquarters

CORPORATE SOLAR ENERGY DIVISION
6 Takeda Tobadono-cho
Fushimi-ku, Kyoto
612-8501 Japan
Phone:(81)75-604-3476 Telefax:(81)75-604-3475
<http://www.kyocera.com>

● KYOCERA Solar, Inc.

7812 East Acoma Drive
Scottsdale, AZ 85260, USA
Phone:(1)480-948-8003 or (800)223-9580 Telefax:(1)480-483-6431
<http://www.kyocerasolar.com>

● KYOCERA Solar do Brasil Ltda.

Energia Renovavel LTDA,
Rua Maurisio da Costa Faria, 85
22780-280, Recreio, Rio da Janeiro, Brazil
Phone:(55)21-2437-8525 Telefax:(55)21-2437-2338
<http://www.kyocerasolar.com.br>

● KYOCERA Solar Pty Ltd.

Level 3, 6-10 Talavera Road, North Ryde
N.S.W. 2113 Australia
Phone:(61)2-9870-3948 Telefax:(61)2-9888-9588
<http://www.kyocerasolar.com.au/>

● KYOCERA Fineceramics GmbH

Fritz Muller strasse 107, D-73730 Esslingen, Germany
Phone:(49)711-9393417 Telefax:(49)711-9393450
<http://www.kyocerasolar.de/>

● KYOCERA Asia Pacific Pte. Ltd.

298 Tiong Bahru Road, #13-03/05
Central Plaza, Singapore 168730
Phone:(65)271-0500 Telefax:(65)271-0600

● KYOCERA Asia Pacific Ltd.

Room 803, Tower 1 South Seas Centre, 75 Mody Road,
Tsimshatsui East, Kowloon, Hong Kong
Phone:(852)2-7237183 Telefax:(852)2-7244501

● KYOCERA Asia Pacific Ltd. Taipei Office

10 FL, No.66, Nanking West Road, Taipei, Taiwan
Phone:(886)2-2555-3609 Telefax:(886)2-2559-4131

● KYOCERA(Tianjin) Sales & Trading Corporation

Binjiang International Hotel 1106
105 Jianshe Road Heping Dist, Tianjin China
Tel:(22)2331-8590 Fax:(22)2330-6276