

The BP 585F PV module uses proprietary processes which produce the most efficient volume-manufactured photovoltaics in the world. Its high efficiency and energy density suit it particularly for applications which need maximum PV generation from a limited array area, and for climates with poor insolation. Features include a lightweight anodized aluminum frame and a polycarbonate junction box. With nominal maximum power of 85 watts, the BP 585F is typically used in utility grid-connected building facades and roof systems, telecommunication systems, pumping and irrigation, cathodic protection, remote homes, and land-based navigation aids.

It is also available as a frameless laminate.

Proven Materials and Construction

BP Solar's quarter-century of field experience shows in every aspect of this module's construction and materials:

- Glass-filled polycarbonate junction box;
- Laser patterning and processing minimizes cell front shading, maximizes efficiency;
- 36 high-efficiency monocrystalline cells laminated between sheets of ethylene vinyl acetate (EVA) and high-transmissivity low-iron 3 mm tempered glass.



Clear Anodized Frame

Limited Warranties

- Power output for 25 years;
- Freedom from defects in materials and workmanship for 5 years.

See our website or your local representative for full terms of these warranties.

Quality and Safety

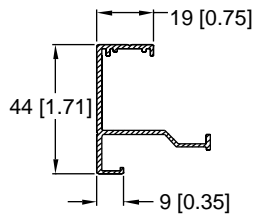
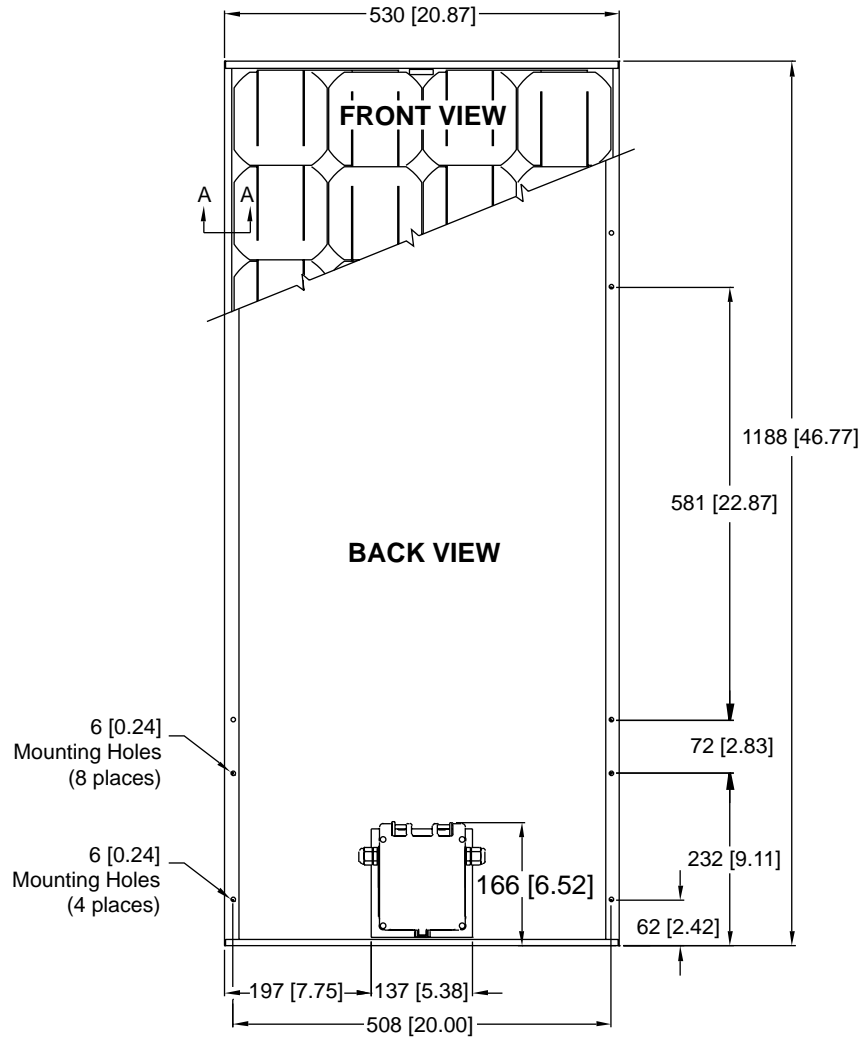
The BP 585F is manufactured in ISO 9001-certified factories, certified by TÜV Rheinland as Class II equipment for use in systems with voltage up to 850VDC, and complies with the requirements of IEC 61215, including:

- repetitive cycling between -40°C and 85°C at 85% relative humidity;
- simulated impact of 25 mm (one-inch) hail at terminal velocity;
- a "damp heat" test, consisting of 1000 hours of exposure to 85°C and 85% relative humidity;
- a "hot-spot" test, which determines a module's ability to tolerate localized shadowing (which can cause reverse-biased operation and localized heating);
- static loading, front and back, of 2400 pascals (50 psf).



BP 585F





Section A-A

BP 585F

Mechanical Characteristics

BP 585F Weight
7.5 kg (16.5 pounds)

Dimensions

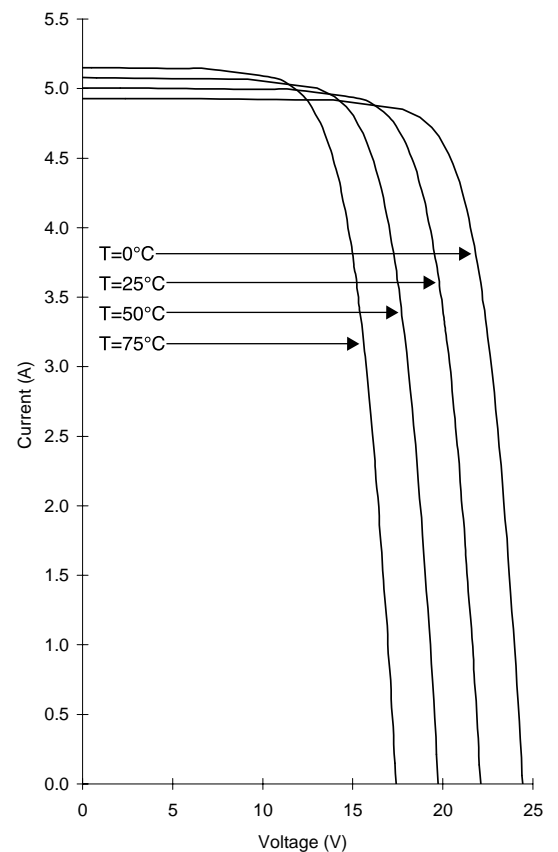
Unbracketed dimensions are in millimeters.
Bracketed dimensions are in inches. Overall tolerances $\pm 3\text{mm}$ (1/8")

Typical Electrical Characteristics ⁽¹⁾	BP 580F	BP 585F
Maximum Power (P_{max}) ⁽⁴⁾	80W	85W
Voltage at P_{max} (V_{mp})	18.0V	18.0V
Current at P_{max} (I_{mp})	4.44A	4.72A
Warranted minimum P_{max}	75W	80W
Short circuit current (I_{sc})	4.7A	5.0A
Open-circuit voltage (V_{oc})	22.0V	22.1V
Temperature coefficient of I_{sc}	(0.065±0.015)%/°C	
Temperature coefficient of V_{oc}	-(80±10)mV/°C	
Temperature coefficient of Power	-(0.5±0.05)%/°C	
NOCT ⁽³⁾	47±2°C	
Maximum System Voltage ⁽²⁾	600V	

Notes

- These data represent the performance of typical BP 580F and BP 585F modules as measured at their output terminals. The data are based on measurements made in accordance with ASTM E1036-85 corrected to SRC (Standard Reporting Conditions, also known as STC or Standard Test Conditions), which are:
 - illumination of 1 kW/m² (1 sun) at spectral distribution of AM 1.5 (ASTM E892-87 global spectral irradiance);
 - cell temperature of 25°C.
- U.S. NEC rating.
- The cells in an illuminated module operate hotter than the ambient temperature. NOCT (Nominal Operating Cell Temperature) is an indicator of this temperature differential, and is the cell temperature under Standard Operating Conditions: ambient temperature of 20°C, solar irradiation of 0.8 kW/m², and wind speed of 1 m/s.
- During the stabilization process which occurs during the first few months of deployment, module power may decrease approximately 3% from typical P_{max} .

BP 585F I-V Curves





This publication summarizes product specifications and warranty. For details of construction, performance, and warranty, see our website www.bpsolar.com or contact your local representative. Specifications subject to change without notice. This publication summarizes product specifications and warranty. For details of construction, perform-



BP Solar uses recycled and recyclable materials in its operation to the fullest extent.