

# DATA SHEET

## BRISTILE **SOLAR**



### ***BREC45S-Rab Bristile Roofing***

***10 Cells Monocrystalline***

***45W Power Output Peak***

***16% Maximum Efficiency***

***0~+3% Power Output Guarantee***

*Module Certified to withstand wind and snow load of 2400 Pascal.*

**Solar cell:** High efficiency monocrystalline solar cell. Even under weak light, the solar module can maximise it's power output.

**Tempered glass:** Anti-reflecting coating and high transmission rate glass increase the power output and mechanical strength of the solar module.

**EVA and TPT:** Using high quality EVA and TPT to prevent destroying and water. The use of high quality EVA and TPT increases the panels reliability and service life

**Junction box:** Fully encapsulated water-proof junction box for excellent performance in adverse weather conditions such as wind, hail and resists moisture ingress.

**Certificates issued by international authorities:** ISO Quality Management system, CE, TUV (IEC61215 and IEC61730).

### 1. Mechanical Characteristics

<b>Cell Size (mm)</b>	156 x 156
<b>No. of cells</b>	10(2 x 5)
<b>Module Size (mm)</b>	823 x 340 x 61
<b>Module Weight (KG)</b>	11.2

### 3. Construction Materials

<b>Front Glass</b>	3.2mm, Low Iron, Tempered Glass
<b>Junction Box</b>	IP 67 Rated (Black)
<b>Output Cables</b>	TUV 1x4mm <sup>2</sup> , length: 600/700mm
<b>Connector</b>	Hengda PV-ST01
<b>Encapsulation Material</b>	EVA (0.45±0.03mm thickness)
<b>Back Foil</b>	Black TPT (0.32±0.03mm thickness)
<b>Fixing Adhesive</b>	Silicone Sealant (Black)

### 4. Temperature Coefficient

<b>Power Tolerance</b>	0~+3%
<b>Temperature Coefficient of Pmax</b>	(-0.41±0.05)%/°C
<b>Temperature Coefficient of Voc</b>	(-0.34±0.02)%/°C
<b>Temperature Coefficient of Isc</b>	(0.05±0.01) %/°C
<b>NOTC (°C)</b>	(47±2) °C

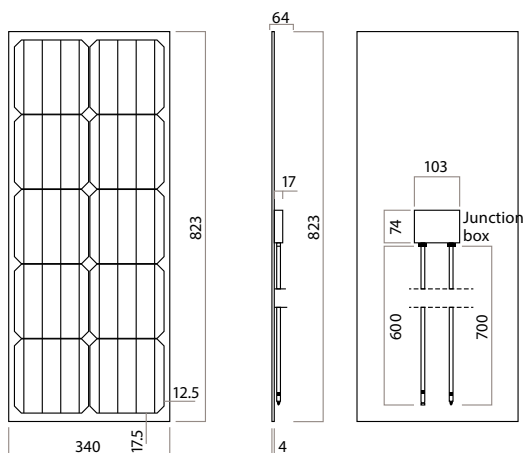
### 2. Packaging Characteristics

<b>Number of modules per pallet</b>	22
<b>Number of pallets per 20' /40' / 40HC container</b>	24/48/60
<b>Packaging box dimensions (mm)</b>	1450 x 900 x 560
<b>Box Weight (KG)</b>	290

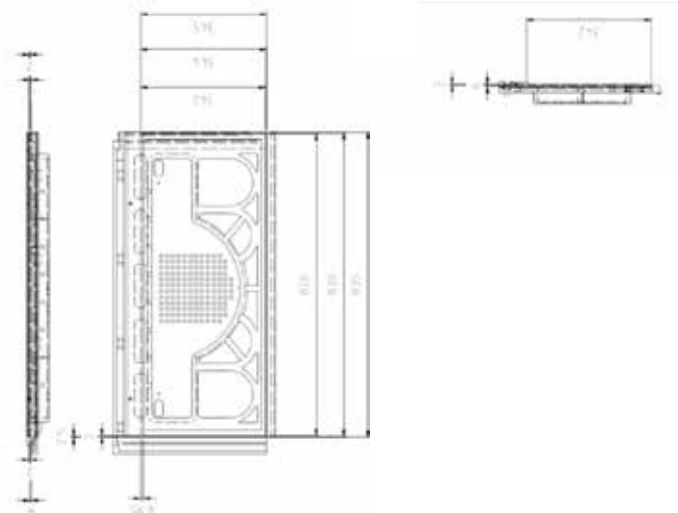
### 6. Operating Conditions

<b>Max. system voltage</b>	1000VDC (IEC)
<b>Max. system fuse rating (A)</b>	10
<b>Operating temperature (°C)</b>	-40~85
<b>Max. static load, front (e.g., snow) pa</b>	2400/pa
<b>Max. static load, back (e.g., wind) pa</b>	2400/pa

### 5A. Module Diagram (without frame)



### 5B. Frame Diagram (no module)

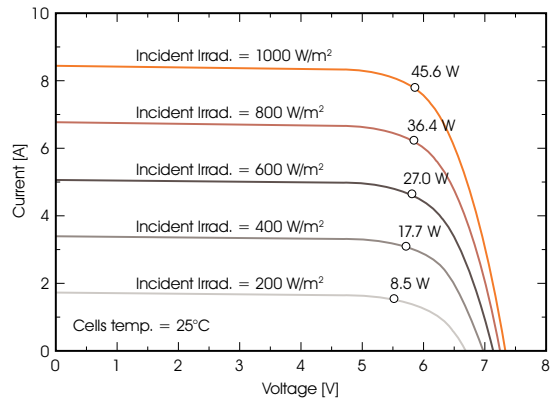
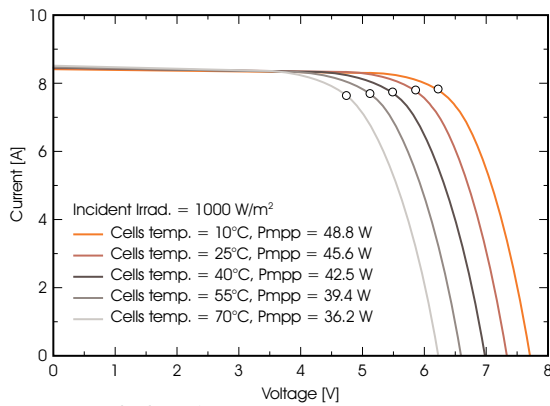


### 7. Electrical Parameters at Standard Test Conditions (STC)

Module type	BREC45S-Rab
Rated Maximum Power (Pmax/W)	45
Maximum Power Voltage (Vmp/V)	5.22
Open-circuit Voltage (Voc/V)	6.41
Maximum Power Current (Imp/A)	8.62
Short-circuit Current (Isc/A)	9.09
Module Efficiency (%)	16.0

STC: Irradiance 1000W/M<sup>2</sup> Module Temperature: 25°C AM=1.5

### 8. IV Curve



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*This publication summarizes product warranty and specification, which is subject to change without notice.*



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Bristile Roofing is part of the Brickworks Group

The product images shown in this brochure give a general indication of product colour for your preliminary selection. Bristile Roofing recommends all customers see actual product samples at a selection centre prior to making final selections.