




- High Temperature and Low Light Performance
- 25 Year Warranty on Power Output at 80%
- Quick-Connect Terminals\*
- Bypass Diodes for Shadow Tolerance
- UL Listed to 600 VDC 
- Meets IEC 61646 Requirements
- Miami-Dade Approved

### PERFORMANCE CHARACTERISTICS

Rated Power (P<sub>max</sub>): 136W

Production Tolerance: ±5%

### CONSTRUCTION CHARACTERISTICS

Dimensions: Length: 5486 mm (216"), Width: 394 mm (15.5"),  
Depth: 4 mm (0.2"), 16 mm (0.6") including junction box

Weight: 7.7 kg (17.0 lbs.)

Outlet Cables: ~2.5 mm<sup>2</sup> cable with weatherproof DC rated quick-connect terminal\*  
560 mm (22") length

By-pass Diodes: Connect across every solar cell

Laminate

Encapsulation: Durable ETFE (e.g. Tefzel<sup>®</sup>) high light-transmissive polymer

Adhesive: Ethylene propylene copolymer

Cell Type: 22 triple junction amorphous silicon solar cells 356 x 239 mm (14" x 9.4")  
connected in series

### CERTIFICATIONS

 Listed by Underwriter's Laboratories for electrical and fire safety (Class A Max. Slope 2/12, Class B Max. Slope 3/12, and Class C Unlimited Slope fire ratings) for use in systems up to 600 VDC.

Miami-Dade approved.

### LAMINATE STANDARD CONFIGURATION

Photovoltaic laminate with potted terminal housing assembly with output cables and quick-connect terminals\*.

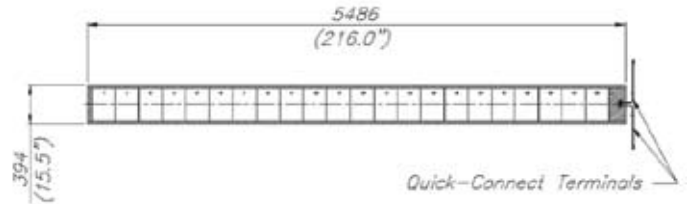
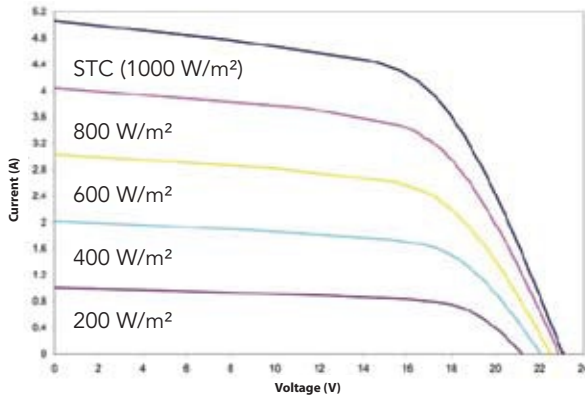
### APPLICATION CRITERION

- New or other qualified roof installations
- 16" minimum steel pan width
- PVDF Coated (Galvalume<sup>®</sup>, Zinalume<sup>®</sup> or aluminum panels)
- Roof panels with flat surface (without pencil beads, stiffening ribs, or decorative stippling)
- Installation by certified installers only
- Installation temperature between 10°C - 40°C (50°F - 100°F)
- Maximum roof temperature 85°C (185°F)
- Refer to manufacturer's installation guide for approved substrates & installation methods



\*e.g., Multi-Contact (MC<sup>®</sup>) connectors

### IV Curves at various levels of irradiance at Air Mass 1.5 and 25°C Cell Temperature



All measurements in mm. Inches in parentheses.

Tolerances: Length:  $\pm 5$  mm (1/4")

Width:  $\pm 3$  mm (1/8")

#### ELECTRICAL SPECIFICATIONS: STC

(1000 W/m<sup>2</sup>, AM 1.5, 25°C Cell Temperature)

Maximum Power (Pmax): 136 W

Voltage at Pmax (Vmp): 33.0 V

Current at Pmax (Imp): 4.1 A

Short-circuit Current (Isc): 5.1 A

Open-circuit Voltage (Voc): 46.2 V

Maximum Series Fuse Rating: 8 A

#### TEMPERATURE COEFFICIENTS

(at AM 1.5, 1000 W/m<sup>2</sup> irradiance)

Temperature Coefficient of Isc: 5.1mA/K

Temperature Coefficient of Voc: -176mV/K

Temperature Coefficient of Pmax: -286mW/K

Temperature Coefficient of Imp: 4.1mA/K

Temperature Coefficient of Vmp: -102mV/K

#### NOCT

(800 W/m<sup>2</sup>, AM 1.5, 1 m/sec. wind)

Maximum Power (Pmax): 105 W

Voltage at Pmax (Vmp): 30.8 V

Current at Pmax (Imp): 3.42 A

Short-circuit Current (Isc): 4.1 A

Open-circuit Voltage (Voc): 21.1 V

NOCT: 46°C

#### NOTES:

1. During the first 8-10 weeks of operation, electrical output exceeds specified ratings. Power output may be higher by 15%, operating voltage may be higher by 11% and operating current may be higher by 4%.
2. Electrical specifications are based on measurements performed at standard test conditions of 1000 W/m<sup>2</sup> irradiance, Air Mass 1.5, and Cell Temperature of 25°C after stabilization.
3. Actual performance may vary up to 10% from rated power due to low temperature operation, spectral and other related effects. Maximum system open-circuit voltage not to exceed 600 VDC per UL.
4. Specifications subject to change without notice.