

- **Shadow and High Heat Tolerant**
- **20 Year Warranty on Power Output at 80%**
- **Quick-Connect Terminals***
- **Bypass Diodes for Shadow Tolerance**
- **UL Listed to 600 VDC** (UL)
- **Meets IEC 61646 Requirements**



PERFORMANCE CHARACTERISTICS

Rated Power (Pmax): 124W
Production Tolerance: ± 5%

CONSTRUCTION CHARACTERISTICS

Dimensions: Length: 5007mm (197.1"), Width: 394mm (15.5"), Depth: 4mm (0.2"), 16mm (0.6") including potted terminal housing assembly.

Weight: 7.0 kg (15.5 lbs.).

Output Cables: ~2.5mm² cable with weatherproof DC rated quick-connect terminals* 560mm (22") length.

By-pass Diodes: Connected across every solar cell.

Laminate Encapsulation: Durable ETFE (e.g. Tefzel®) high light-transmissive polymer.

Adhesive: Ethylene propylene copolymer adhesive-sealant with microbial inhibitor.

Cell Type: 20 triple junction amorphous silicon solar cells 356 x 239mm (14" x 9.4") connected in series.



FLEXIBLE



LIGHTWEIGHT



NO-GLASS



DURABLE



SHADOW TOLERANT



HIGH TEMP PERFORMANCE

QUALIFICATIONS AND SAFETY

- (UL) 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.

LAMINATE STANDARD CONFIGURATION

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

OPTIONAL CONFIGURATION

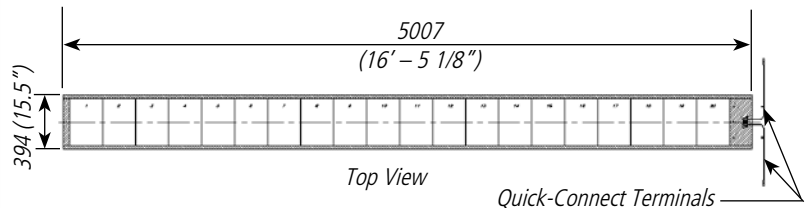
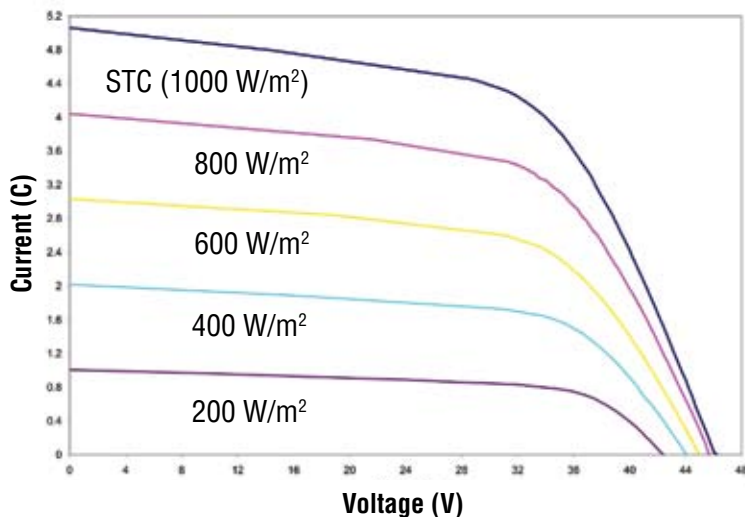
Photovoltaic laminate with junction box.

*e.g., Multi-Contact (MC®) connectors.

APPLICATION CRITERION

- New or qualified new roof installations
- 16" minimum steel pan width
- PVDF Coated (Galvalume® or Zinalume®) steel metal pan
- Steel pans 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 manufacturers installation guide for approved substrates & installation methods

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: ± 5mm (1/4")
Width: ± 3mm (1/8")**

ELECTRICAL SPECIFICATIONS: STC

(1000 W/m², AM 1.5, 25° C Cell Temperature)

Maximum Power (P_{max}): 124 W

Voltage at P_{max} (V_{mp}): 30 V

Current at P_{max} (I_{mp}): 4.1 A

Short-circuit Current (I_{sc}): 5.1 A

Open-circuit Voltage (V_{oc}): 42 V

Maximum Series Fuse Rating: 8 A

NOCT

(800 W/m², AM 1.5, 1 m/sec. wind)

Maximum Power (P_{max}): 96 W

Voltage at P_{max} (V_{mp}): 28 V

Current at P_{max} (I_{mp}): 3.42 A

Short-circuit Current (I_{sc}): 4.1 A

Open-circuit Voltage (V_{oc}): 38.4 V

NOCT: 46° C

TEMPERATURE COEFFICIENTS

(at AM 1.5, 1000 W/m² irradiance)

Temperature Coefficient of I_{sc}: 5.1mA/K (0.10%/°C)

Temperature Coefficient of I_{mp}: 4.1mA/K (0.10%/°C)

Temperature Coefficient of V_{oc}: -160mV/K (-0.38%/°C)

Temperature Coefficient of V_{mp}: -93mV/K (-0.31%/°C)

Temperature Coefficient of P_{max}: -260mW/K (-0.21%/°C)

NOTES:

- 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%.
- Electrical specifications are based on measurements performed at standard test conditions of 1000 W/m² irradiance, Air Mass 1.5, and Cell Temperature of 25°C after stabilization.
- 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.
- Specifications subject to change without notice.

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