RNG – 50D
50W Monocrystalline Solar Panel

Key Features
- Top Ranked PTC Rating
- High Module Conversion Efficiency
- Fast and Inexpensive Mounting
- Maximizes System output by reducing mismatch loss
- 100% EL testing on all Renogy Modules, Guaranteed no Hot Spots

Electrical Characteristics

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power at STC (Pmax)</td>
<td>50 W</td>
</tr>
<tr>
<td>Optimum Operating Voltage (Vmp)</td>
<td>18.5 V</td>
</tr>
<tr>
<td>Optimum Operating Current (Imp)</td>
<td>2.7 A</td>
</tr>
<tr>
<td>Open Circuit Voltage (Voc)</td>
<td>22.7 V</td>
</tr>
<tr>
<td>Short Circuit Current (Isc)</td>
<td>2.84 A</td>
</tr>
<tr>
<td>Maximum System Voltage</td>
<td>600 VDC</td>
</tr>
<tr>
<td>Maximum Series Fuse Rating</td>
<td>15 A</td>
</tr>
</tbody>
</table>

STC: Irradiance 1000W/m², Temperature 25°C, AM =1

Mechanical Properties

- Solar Cell: Monocrystalline (125 x 125 mm)
- # of Cells: 36 (4 x 9)
- Dimensions: 630 x 541 x 30 mm (24.8 x 21.3 x 1.2 in)
- Weight: 4.5 kg. (9.9 lbs.)
- Front Glass: 3.2 mm (0.13 inches) Tempered Glass
- Frame: Anodized Aluminum Alloy
- Junction Box: IP65 Rated
- Output Cables: 4.0 mm² (0.006 in²), 600mm (23.6 in)
- Connectors: MC4 Connectors
- Fire Rating: Class C

Temperature Characteristics

- Operating Module Temperature: -40°C to +80°C
- Nominal Operating Cell Temperature (NOC): 47±2°C
- Temperature Coefficient of Pmax: -0.23%/°C
- Temperature Coefficient of Voc: -0.33%/°C
- Temperature Coefficient of Isc: 0.05%/°C

Module Diagram

IV-Curve