Introduction

This time-tested legacy module series has been proven to be one of the powerful and most reliable products offered by JA Solar and the most popular choice by PV system installers and customers around world.

**Poly 290W Module**

**JAP60S09 270-290/SC/1500V Series**

- 5 busbar solar cell design
- Low cost
- Anti-PID
- Highly reliable due to strict quality control

**Superior Warranty**

- 12-year product warranty
- 25-year linear power output warranty

![Warranty Chart]

**Comprehensive Certificates**

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems

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Specifications subject to technical changes and tests. JA Solar reserves the right of final interpretation.

Shanghai JA Solar Technology Co., Ltd.
**OPERATING CONDITIONS**

- **Maximum System Voltage**: 1500V DC (IEC)
- **Operating Temperature**: -40°C ~ +85°C
- **Maximum Series Fuse**: 20A
- **Maximum Static Load, Front**: 3600Pa, 1.5
- **Maximum Static Load, Back**: 1400Pa, 1.5
- **NOCT**: 45±2°C
- **Application Class**: Class A

**CHARACTERISTICS**

- **Current-Voltage Curve**: JAP60S09-280/SC/1500V
- **Power-Voltage Curve**: JAP60S09-280/SC/1500V
- **Current-Voltage Curve**: JAP60S09-280/SC/1500V

**SPECIFICATIONS**

- **Cell**: Poly
- **Weight**: 18.4kg±3%
- **Dimensions**: 1657±2mm×996±2mm×35±1mm
- **Cable Cross Section Size**: 4mm²
- **No. of cells**: 60 (6x10)
- **Connector**: PV-KST4-EVO2/xy, PV-KBT4-EVO2/xy, QC4.10-35/45
- **Country of Manufacturer**: China/Vietnam

**ELECTRICAL PARAMETERS AT STC**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>JAP60S09-270/SC/1500V</th>
<th>JAP60S09-275/SC/1500V</th>
<th>JAP60S09-280/SC/1500V</th>
<th>JAP60S09-285/SC/1500V</th>
<th>JAP60S09-290/SC/1500V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Maximum Power(Pmax) [W]</td>
<td>270</td>
<td>275</td>
<td>280</td>
<td>285</td>
<td>290</td>
</tr>
<tr>
<td>Open Circuit Voltage(Voc) [V]</td>
<td>37.92</td>
<td>38.18</td>
<td>38.43</td>
<td>38.69</td>
<td>38.95</td>
</tr>
<tr>
<td>Maximum Power Voltage(Vmp) [V]</td>
<td>30.72</td>
<td>30.94</td>
<td>31.19</td>
<td>31.43</td>
<td>31.70</td>
</tr>
<tr>
<td>Maximum Power Current(Imp) [A]</td>
<td>8.79</td>
<td>8.89</td>
<td>8.98</td>
<td>9.07</td>
<td>9.15</td>
</tr>
<tr>
<td>Module Efficiency [%]</td>
<td>16.4</td>
<td>16.7</td>
<td>17.0</td>
<td>17.3</td>
<td>17.6</td>
</tr>
<tr>
<td>Power Tolerance</td>
<td>0~+5W</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature Coefficient of Isc(α_Isc)</td>
<td>+0.058%/℃</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Temperature Coefficient of Voc(β_Voc)</td>
<td>-0.330%/℃</td>
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<tr>
<td>Temperature Coefficient of Pmax(γ_Pmp)</td>
<td>-0.400%/℃</td>
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**ELECTRICAL PARAMETERS AT NOCT**

<table>
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<tr>
<th>TYPE</th>
<th>JAP60S09-270/SC/1500V</th>
<th>JAP60S09-275/SC/1500V</th>
<th>JAP60S09-280/SC/1500V</th>
<th>JAP60S09-285/SC/1500V</th>
<th>JAP60S09-290/SC/1500V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Max Power(Pmax) [W]</td>
<td>200</td>
<td>204</td>
<td>208</td>
<td>212</td>
<td>216</td>
</tr>
<tr>
<td>Open Circuit Voltage(Voc) [V]</td>
<td>36.25</td>
<td>36.56</td>
<td>36.85</td>
<td>37.05</td>
<td>37.26</td>
</tr>
<tr>
<td>Max Power Voltage(Vmp) [V]</td>
<td>29.29</td>
<td>29.48</td>
<td>29.69</td>
<td>29.88</td>
<td>30.09</td>
</tr>
<tr>
<td>Short Circuit Current(Isc) [A]</td>
<td>7.31</td>
<td>7.40</td>
<td>7.48</td>
<td>7.56</td>
<td>7.64</td>
</tr>
<tr>
<td>Max Power Current(Imp) [A]</td>
<td>6.83</td>
<td>6.92</td>
<td>7.01</td>
<td>7.10</td>
<td>7.18</td>
</tr>
<tr>
<td>NOCT</td>
<td>45±2°C</td>
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<td></td>
<td></td>
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</tbody>
</table>

**MECHANICAL DIAGRAMS**

- **Cell Weight**: 18.4kg±3%
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- **Country of Manufacturer**: China/Vietnam

**Remark**: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

**Remark**: Customized frame color and cable length available upon request.

**Measurement tolerance at STC**: Pmax ±3%, Voc ±2% and Isc ±4%.

**Units**: mm

**Grounding holes**: 10 places

**Mounting holes**: 8 places

**Draining holes**: 8 places

**Enlarge view of mounting hole (10:1)**

**Label**

**Country of Manufacturer**: China/Vietnam

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