



**P**



**Technology**

High current, lower Rs loss  
< 2% (1st year) / 0.45% (Linear)

**High Yield**

Technology,  
depends on different conditions

**Anti-PID Performance**

of industry standard Anti-PID test

## ELECTRICAL CHARACTERISTICS

| Testing Condition             | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  | STC   | NMOT  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W)        | 395   | 294   | 400   | 298   | 405   | 302   | 410   | 306   | 415   | 310   |
| Operating Voltage (Vmpp/V)    | 30.85 | 28.8  | 31.05 | 29.0  | 31.24 | 29.2  | 31.43 | 29.3  | 31.64 | 29.6  |
| Operating Current (Impp/A)    | 12.81 | 10.23 | 12.89 | 10.30 | 12.97 | 10.36 | 13.05 | 10.42 | 13.13 | 10.48 |
| Open-Circuit Voltage (Voc/V)  | 36.75 | 34.6  | 37.00 | 34.8  | 37.25 | 35.1  | 37.50 | 35.3  | 37.75 | 35.5  |
| Short-Circuit Current (Isc/A) | 13.69 | 11.04 | 13.78 | 11.11 | 13.86 | 11.17 | 13.94 | 11.24 | 14.02 | 11.30 |
| Module Efficiency (%)         | 20.22 |       | 20.48 |       | 20.73 |       | 21.00 |       | 21.25 |       |

STC: Irradiance 1000W/m<sup>2</sup>, Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3%  
 NMOT: Irradiance 800W/m<sup>2</sup>, Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

## REAR SIDE POWER GAIN(REFERENCE TO 410W FRONT)

| Pmax gain | 5%    | 10%   | 15%   | 20%   | 25%   |
|-----------|-------|-------|-------|-------|-------|
| Pmax/W    | 431   | 451   | 472   | 492   | 513   |
| Vmpp/V    | 31.43 | 31.43 | 31.43 | 31.43 | 31.43 |
| Impp/A    | 13.70 | 14.36 | 15.01 | 15.66 | 16.31 |
| Voc/V     | 37.50 | 37.50 | 37.50 | 37.50 | 37.50 |
| Isc/A     | 14.65 | 15.35 | 16.04 | 16.74 | 17.44 |

## MECHANICAL CHARACTERISTICS

|                   |   |
|-------------------|---|
| Cell Type         | Monocrystalline Silicon (10Busbar)  |
| No. of Cells      | 108pcs in series (6*18)   |
| Module Dimensions | 1722*1134*30mm (67.80*44.65*1.18inches)                                     |
| Weight            | 25.5kg (56.22lbs)   |
| Front Glass       | 2.0mm AR Coating Semi-tempered Glass  |
| Back Glass        | 2.0mm Glazed Semi-tempered Glass  |
| Frame             | Anodized Aluminium Alloy  |
| Junction Box      | IP68, 3 Bypass Diodes   |
| Output Cables     | 4mm <sup>2</sup> (IEC), 12AWG(UL)<br>350mm(+),250mm(-) or Customized Length |
| Connectors        | T01/LJQ-3-CSY/MC4/MC4-EV02  |

## APPLICATION CONDITIONS

|                           |                                     |
|---------------------------|-------------------------------------|
| Maximun System Voltage    | 1500V/DC                            |
| Operating Temperature     | -40°C~+85°C                         |
| Maximun Series Fuse       | 30A                                 |
| Safety Protection Class   | Class II                            |
| Mechanical Load           | Front side 5400Pa, Back side 2400Pa |
| Refer. Bifaciality Factor | 70%±5%                              |

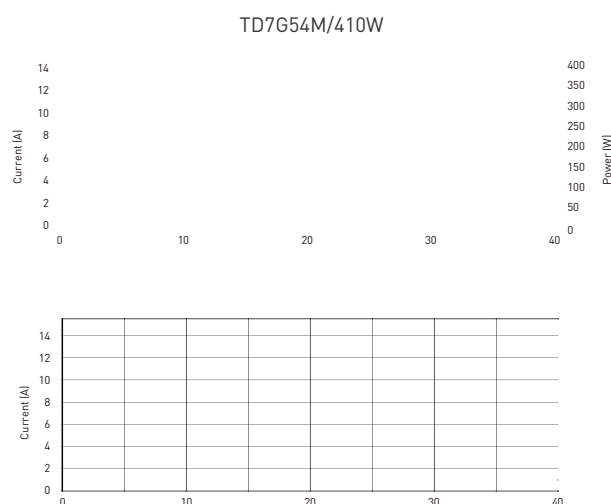
## TEMPERATURE CHARACTERISTICS

|  |            |
|--|------------|
| Temperature Coefficient of Pmax            | -0.35%/°C  |
| Temperature Coefficient of Voc             | -0.26%/°C  |
| Temperature Coefficient of Isc             | +0.048%/°C |
| Nominal Module Operating Temperature(NMOT) | 43±2°C     |

## PACKING CONFIGURATION

|                             |     |         |
|-----------------------------|-----|---------|
| Pieces Per Pallet           | 36  | 36(USA) |
| Pieces Per Container(40'HQ) | 936 | 720     |

## I-V CURVE



## TECHNICAL DRAWINGS



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