

Product Specifications 156mm full square Multi Crystalline 2 BUSBAR Solar Cells.

1. Highlights:

- ✓ Narrow cell banding offers best cell to module wattage realization.
- ✓ 100% grading on "Peak Power".
- ✓ 100% check on visual appearance.
- ✓ Each cell produced at our facility undergoes a series of through quality test.
- ✓ Free from micro cracks.
- ✓ Reference edge on both faces for easier orientation.

2. Cell Characteristics: General

- | | | |
|-----|--------------|---------------------|
| 2.1 | Type of cell | : Multi crystalline |
| 2.2 | Geometry | : full square |

3. Cell Characteristics: Mechanical

- | | | |
|-----|-----------------------------|-----------------------------------|
| 3.1 | Length | : 156.0 ± 0.5 mm |
| 3.2 | Width | : 156.0 ± 0.5 mm |
| 3.3 | Nominal surface area | : 243.36 cm ² |
| 3.4 | Accuracy of angles | : 90° ± 0.3° |
| 3.5 | Thickness | : 200 ± 30 (or) 180 ± 30 μm |
| 3.6 | Maximum bow | : < 1.5 mm |
| 3.7 | Bus bar width (Front) | : 2.0 mm |
| 3.8 | Continuous Pad width (Back) | : 2.5 mm |
| 3.9 | Distance between bus bars | : 75.0 mm (from center to center) |

4. Cell Characteristics: Visual

- | | | |
|-----|------------------------|--------------------------|
| 4.1 | A.R. coating | : Silicon nitride |
| 4.2 | Back side surface | : Aluminum |
| 4.3 | Bus bar material front | : Silver |
| 4.4 | Bus bar material back | : Silver Aluminum |
| 4.5 | Micro Cracks | : Free from micro cracks |

5. Cell Characteristics: Electrical

Cells are graded at Peak power with 36 mW banding, the typical grading criteria bin is given below,

5.1 Wattage Table



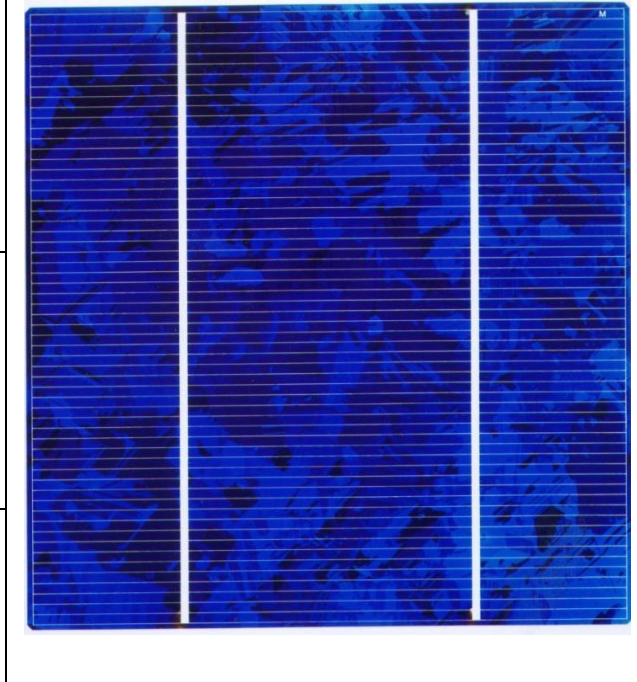


Efficiency %	Peak Power	Typical Parameters				
η [%]	WATTS – [W]	I_{MPP} [A]	V_{MPP} [V]	I_{SC} [A]	V_{OC} [V]	FF [%]
16.12	3.923	7.70	0.509	8.17	0.611	78.0
15.97	3.887	7.66	0.508	8.13	0.610	78.0
15.82	3.851	7.61	0.506	8.09	0.609	78.0
15.68	3.815	7.57	0.505	8.05	0.608	78.0
15.53	3.779	7.52	0.503	8.01	0.607	78.0
15.38	3.743	7.48	0.502	7.97	0.606	78.0
15.24	3.708	7.43	0.500	7.93	0.605	78.0
15.09	3.672	7.39	0.499	7.89	0.604	77.5
14.94	3.636	7.34	0.497	7.85	0.603	77.5
14.79	3.600	7.29	0.496	7.81	0.602	77.0

Note: Parameters specified, are at standard test condition STC, 25°C Ambient, 100 mW/cm² irradiance.

- 5.2 Shunt Resistance : Greater than 15 ohms at-12V
 I. Method of measurement : Dark IV
- 5.3 Polarity : Front negative, back positive
- 5.4 Temperature Coefficient
- A. Open circuit Voltage (dV_{OC}/dt) : -2.130 mV/K
- B. Short circuit current (dI_{SC}/dt) : +2.85 mA/K
- C. Fill factor (dV_{FF}/dt) : -0.102 %/K
- D. Peak Power : -0.585% / deg K



6. Packing:

 <p>Figure. A</p>	 <p>Figure.B</p>	
 <p>Figure.C</p>	 <p>Figure.D</p>	
<p>Figure. A : 100 Cells Bunch Figure. B : 800 Cells in one Small Box Figure. C : 19200 Cells in one Wooden Box Figure. D : Transit monitoring</p>		

7. Cell Drawing:

