

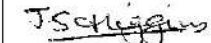

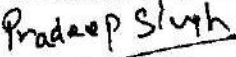

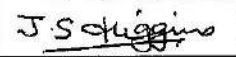
 <b>ITI Limited</b>	<b>TECHNICAL SPECIFICATION</b>		Code	ND9A30012A1B462																																									
	<b>Poly-Crystalline Solar Cell</b>		Used in	SPV Module (125 W) with Cut-Cells																																									
<div>Disclaimer</div> <div>(COPY RIGHT AND COFIDENTIAL) The information in this document is the property of ITI Limited It must not be used directly or indirectly in any way detrimental to the interest of the company</div>	<table><thead><tr><th>Parameter</th><th>Specification</th></tr></thead><tbody><tr><td>Solar Cell</td><td>Multi Crystalline Silicon Solar Cell</td></tr><tr><td>Dimension</td><td>157 mm X 157 mm <math>\pm</math> 0.25 mm</td></tr><tr><td>Thickness</td><td>Over all cell 200<math>\mu</math>m <math>\pm</math> 20<math>\mu</math>m</td></tr><tr><td>Colour</td><td>Light Blue/ Blue/ Dark Blue/ Indigo</td></tr><tr><td>Anti-reflection coating</td><td>Anti-reflecting coating (Silicon Nitride) (PID Free)</td></tr><tr><td>Front Contact (-ve)</td><td>5 nos., 0.7 mm +/- 0.1 mm wide Silver Bus Bar (Continuous or discrete)</td></tr><tr><td>Back Contacts (+ve)</td><td>5 nos., 1.9 mm +/- 0.1 mm wide Silver Bus Bars with Aluminium back surface field (continuous or discrete)</td></tr><tr><td>Bus Bar Distance</td><td>31.2 mm<math>\pm</math> 0.2 mm</td></tr><tr><td>Solderability</td><td>Good solderability of cell front &amp; back contacts with Copper Ribbon of Sn:Pb (60:40)</td></tr><tr><td>Cell Efficiency at STC</td><td>18.20% (Typical)</td></tr><tr><td>Cell Power (P<sub>m</sub>) at STC</td><td>Minimum 4.62 W<sub>p</sub> (Tolerance-0%, +2%)</td></tr><tr><td>Short Ckt Current, I<sub>sc</sub></td><td>8.85 A (Typical)</td></tr><tr><td>Current at MPP ( I<sub>mp</sub>)</td><td>Better than 8.30 A</td></tr><tr><td>Open Ckt Voltage, Voc</td><td>0.636 V (Typical)</td></tr><tr><td>Voltage at MPP( V<sub>mp</sub>)</td><td>0.544 V (Typical)</td></tr><tr><td>Fill Factor</td><td>80 % ( Typical)</td></tr><tr><td rowspan="3">Temperature Coefficient</td><td>I<sub>sc</sub> (Alpha) : 0.04%/K or better</td></tr><tr><td>V<sub>oc</sub> ( Beta) : -0.32%/K or better</td></tr><tr><td>P<sub>mp</sub> (Gama) : -0.39%/K or better</td></tr><tr><td colspan="2">All cells shall be free from following visual defects- 1. Edge Chipping, Edge Broken. 2. Micro Cracks, Pin Holes. 3. Discontinuity of metal printing lines. 4. Any spot, spillage or spear of paste. 5. Colour variation of ARC. 6. Non uniform printing or spreading of line lines.</td></tr></tbody></table>		Parameter	Specification	Solar Cell	Multi Crystalline Silicon Solar Cell	Dimension	157 mm X 157 mm $\pm$ 0.25 mm	Thickness	Over all cell 200 $\mu$ m $\pm$ 20 $\mu$ m	Colour	Light Blue/ Blue/ Dark Blue/ Indigo	Anti-reflection coating	Anti-reflecting coating (Silicon Nitride) (PID Free)	Front Contact (-ve)	5 nos., 0.7 mm +/- 0.1 mm wide Silver Bus Bar (Continuous or discrete)	Back Contacts (+ve)	5 nos., 1.9 mm +/- 0.1 mm wide Silver Bus Bars with Aluminium back surface field (continuous or discrete)	Bus Bar Distance	31.2 mm $\pm$ 0.2 mm	Solderability	Good solderability of cell front & back contacts with Copper Ribbon of Sn:Pb (60:40)	Cell Efficiency at STC	18.20% (Typical)	Cell Power (P <sub>m</sub> ) at STC	Minimum 4.62 W <sub>p</sub> (Tolerance-0%, +2%)	Short Ckt Current, I <sub>sc</sub>	8.85 A (Typical)	Current at MPP ( I <sub>mp</sub> )	Better than 8.30 A	Open Ckt Voltage, Voc	0.636 V (Typical)	Voltage at MPP( V <sub>mp</sub> )	0.544 V (Typical)	Fill Factor	80 % ( Typical)	Temperature Coefficient	I <sub>sc</sub> (Alpha) : 0.04%/K or better	V <sub>oc</sub> ( Beta) : -0.32%/K or better	P <sub>mp</sub> (Gama) : -0.39%/K or better	All cells shall be free from following visual defects- 1. Edge Chipping, Edge Broken. 2. Micro Cracks, Pin Holes. 3. Discontinuity of metal printing lines. 4. Any spot, spillage or spear of paste. 5. Colour variation of ARC. 6. Non uniform printing or spreading of line lines.				
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