

# XS156B3-200R

Monocrystalline X-Cells

<b>Dimension</b>	156mm x 156mm ± 0.5mm
<b>Diagonal</b>	200mm ± 1.0mm ( round chamfers )
<b>Thickness(Si)</b>	200µm ± 30µm
<b>Front</b>	Anisotropically texturized surface and dark silicon nitride anti-reflection coating 1.4mm silver busbars
<b>Back</b>	Full-surface aluminum back-surface field 2.1mm (silver / aluminum) discontinuous soldering pads

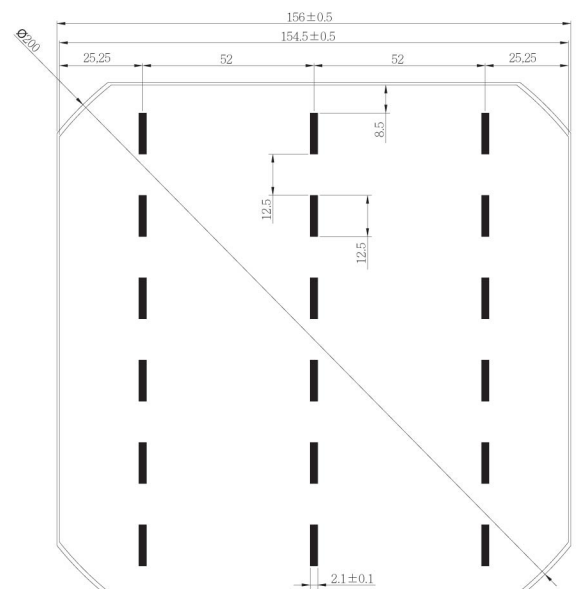
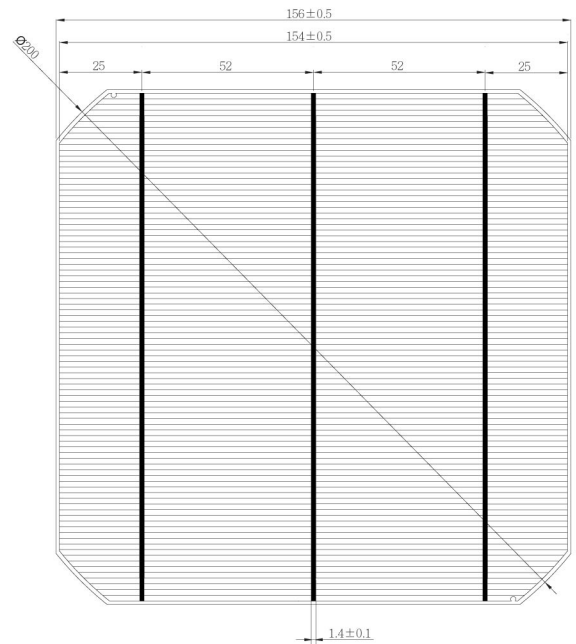


## ► Features

- > High conversion efficiencies resulting in superior power output performance
- > Outstanding power output even in low light or high temperature conditions
- > Optimized design for ease of soldering and lamination
- > Long-term stability, reliability and performance
- > Low breakage rate
- > Color uniformity

## ► Production and Quality Control

- > Precision cell efficiency sorting procedures
- > Stringent criteria for color uniformity and appearance
- > Reverse current and shunt resistance screening
- > REACH-SVHC test passed, ISO9001, ISO14001 and OHSAS 18001 certificated



\* See the reverse side for more detail

### Electrical Performance

Efficiency Code		192	190	189	188	187	186	185	184
<b>Efficiency</b>	Eff (%)	19.20	19.00	18.90	18.80	18.70	18.60	18.50	18.40
<b>Power</b>	P <sub>pm</sub> (W)	4.59	4.54	4.52	4.49	4.47	4.44	4.42	4.40
<b>Max. Power Current</b>	I <sub>pm</sub> (A)	8.48	8.46	8.44	8.42	8.40	8.36	8.34	8.31
<b>Short Circuit Current</b>	I <sub>sc</sub> (A)	9.00	8.98	8.95	8.93	8.91	8.89	8.88	8.87
<b>Max. Power Voltage</b>	V <sub>pm</sub> (V)	0.541	0.537	0.535	0.533	0.532	0.531	0.530	0.529
<b>Open Circuit Voltage</b>	V <sub>oc</sub> (V)	0.636	0.632	0.632	0.631	0.630	0.629	0.629	0.628

Efficiency Code		183	182	181	180	178	176	174	172
<b>Efficiency</b>	Eff (%)	18.30	18.20	18.10	18.00	17.80	17.60	17.40	17.20
<b>Power</b>	P <sub>pm</sub> (W)	4.37	4.35	4.32	4.30	4.25	4.21	4.16	4.11
<b>Max. Power Current</b>	I <sub>pm</sub> (A)	8.31	8.30	8.29	8.28	8.25	8.22	8.20	8.17
<b>Short Circuit Current</b>	I <sub>sc</sub> (A)	8.86	8.86	8.85	8.84	8.83	8.81	8.78	8.76
<b>Max. Power Voltage</b>	V <sub>pm</sub> (V)	0.526	0.524	0.521	0.519	0.515	0.512	0.507	0.503
<b>Open Circuit Voltage</b>	V <sub>oc</sub> (V)	0.627	0.625	0.624	0.623	0.621	0.617	0.615	0.615

Standard test condition : AM1.5, 1000W/m<sup>2</sup>, 25°C. Average accuracy of all tested figures is ±1.5% rel.

### Temperature Coefficients

<b>Current Temperature Coefficient</b>	$\alpha$ (I <sub>sc</sub> )	0.04 %/°C
<b>Voltage Temperature Coefficient</b>	$\beta$ (V <sub>oc</sub> )	-0.33 %/°C
<b>Power Temperature Coefficient</b>	$\gamma$ (P <sub>max</sub> )	-0.42 %/°C

Standard test condition : AM1.5, 1000W/m<sup>2</sup>, 25°C.

### Solderability

**Peel Strength Minimum** > 1.2N/mm

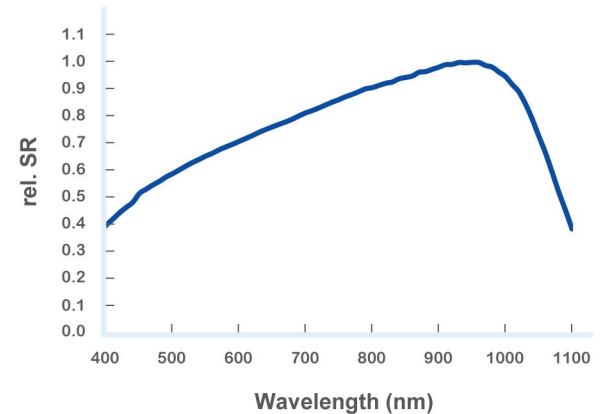
The result listed above was obtained using a soldering iron at 300~400°C with MOTTECH specified flux and ribbon. Results may differ due to different flux, ribbons, soldering methods and parameters.

### Light Intensity Dependence

Intensity W/m <sup>2</sup>	V <sub>pm</sub>	I <sub>pm</sub>
1000	1.000	1.000
800	0.989	0.799
600	0.973	0.598
200	0.911	0.193

Specifications subject to change without prior notice.  
Motech reserves the rights of final interpretation and revision of this datasheet.

### Spectral Response(SR)



### IV Curve

