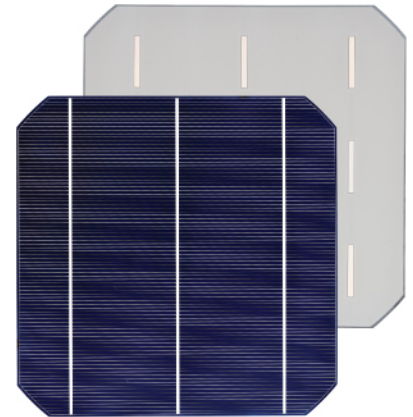


XS156B3-200R

Monocrystalline X-Cells

Dimension	156mm x 156mm ± 0.5mm
Diagonal	200mm ± 1.0mm (round chamfers)
Thickness(Si)	200µm ± 20µm
Front	Anisotropically texturized surface and dark silicon nitride anti-reflection coatings 1.4mm silver busbars
Back	Full-surface aluminum back-surface field 2.5mm (silver / aluminum) discontinuous soldering pads

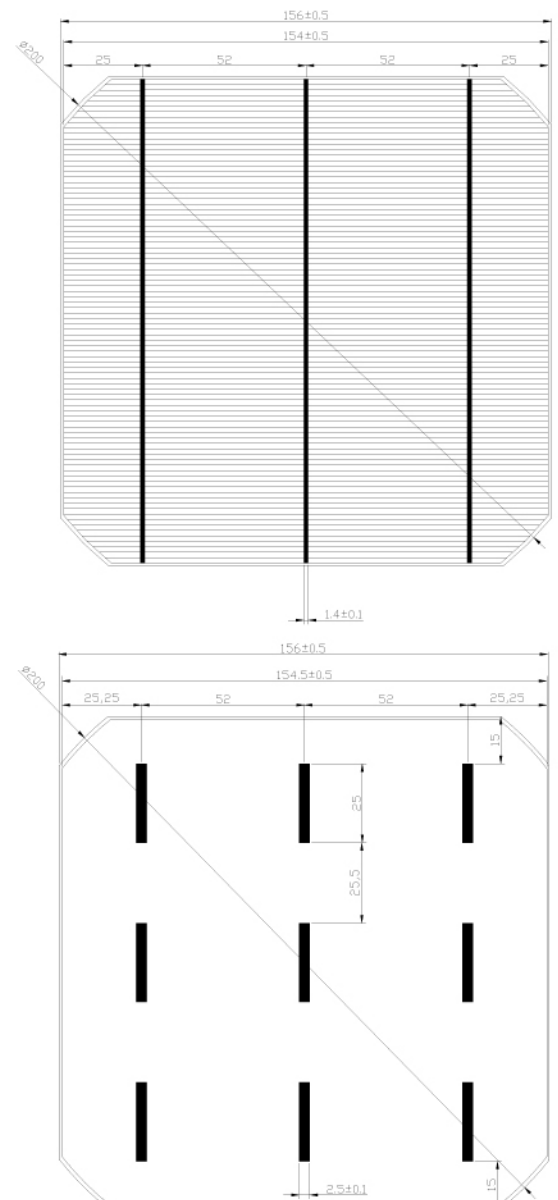


► Features

- > 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
- > Calibrated against Fraunhofer ISE



* See the reverse side for more detail

Electrical Performance

Efficiency Code		196	195	194	193	192	191	190	189
Efficiency	Eff (%)	19.60	19.50	19.40	19.30	19.20	19.10	19.00	18.90
Power	P _{pm} (W)	4.68	4.66	4.64	4.61	4.59	4.56	4.54	4.52
Max. Power Current	I _{pm} (A)	8.56	8.53	8.51	8.49	8.46	8.44	8.42	8.40
Short Circuit Current	I _{sc} (A)	8.99	8.98	8.96	8.94	8.93	8.91	8.90	8.89
Max. Power Voltage	V _{pm} (V)	0.547	0.546	0.545	0.543	0.542	0.540	0.539	0.538
Open Circuit Voltage	V _{oc} (V)	0.643	0.642	0.641	0.640	0.639	0.638	0.637	0.636

Efficiency Code		188	187	186	185	184	183	182	181
Efficiency	Eff (%)	18.80	18.70	18.60	18.50	18.40	18.30	18.20	18.10
Power	P _{pm} (W)	4.49	4.47	4.44	4.42	4.40	4.37	4.35	4.32
Max. Power Current	I _{pm} (A)	8.35	8.34	8.33	8.30	8.27	8.25	8.23	8.20
Short Circuit Current	I _{sc} (A)	8.86	8.85	8.84	8.82	8.81	8.79	8.77	8.76
Max. Power Voltage	V _{pm} (V)	0.538	0.536	0.533	0.532	0.532	0.530	0.529	0.527
Open Circuit Voltage	V _{oc} (V)	0.635	0.634	0.631	0.631	0.630	0.628	0.627	0.626

Standard test condition : AM1.5, 1000W/m², 25°C. Average accuracy of all tested figures is ±1.5% rel.

Temperature Coefficients

Current Temperature Coefficient	α (I _{sc})	0.04 %/°C
Voltage Temperature Coefficient	β (V _{oc})	-0.32 %/°C
Power Temperature Coefficient	γ (P _{max})	-0.42 %/°C

Standard test condition : AM1.5, 1000W/m², 25°C.

Solderability

Peel Strength Minimum > 1.2N/mm

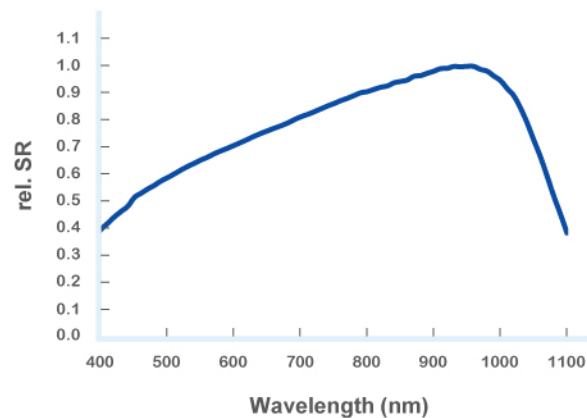
The above can be obtained by soldering iron at 300~400°C with MOTTECH regular flux and ribbon. However, this may vary due to different flux, ribbons, soldering methods and parameters used by the customers.

Light Intensity Dependence

Intensity W/m ²	V _{pm}	I _{pm}
1000	1.000	1.000
800	0.987	0.798
600	0.971	0.597
200	0.906	0.193

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

Spectral Response(SR)



IV Curve

