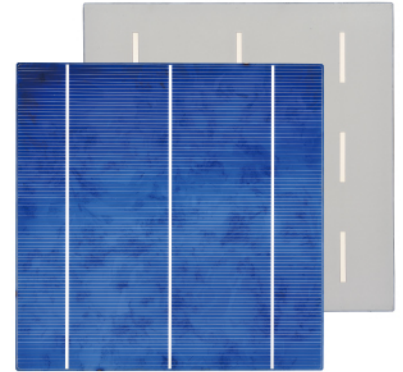


IM156B3

Multicrystalline I-Cells

Dimension	156mm x 156mm ± 0.5mm
Thickness(Si)	180µm ± 20µm, 200µm ± 20µm
Front	Blue silicon nitride anti-reflective coatings
	1.4mm silver busbar
Back	Full-surface aluminum back-surface field
	2.5mm (silver / aluminum) discontinuous soldering pads

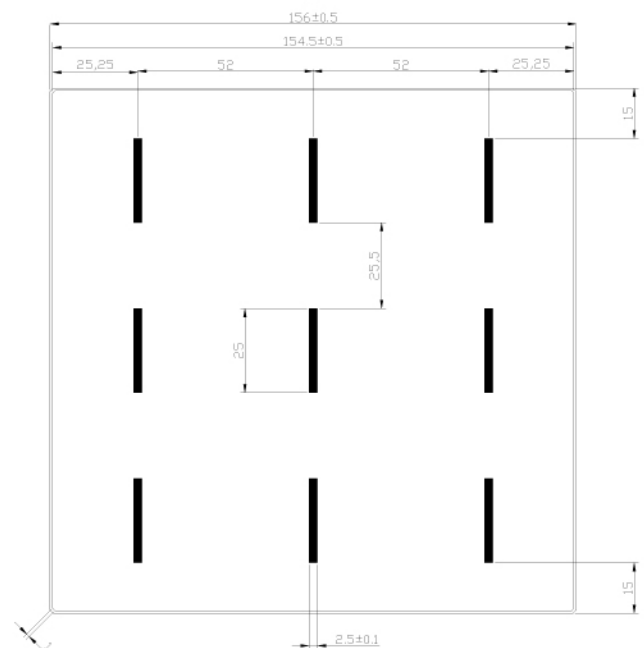
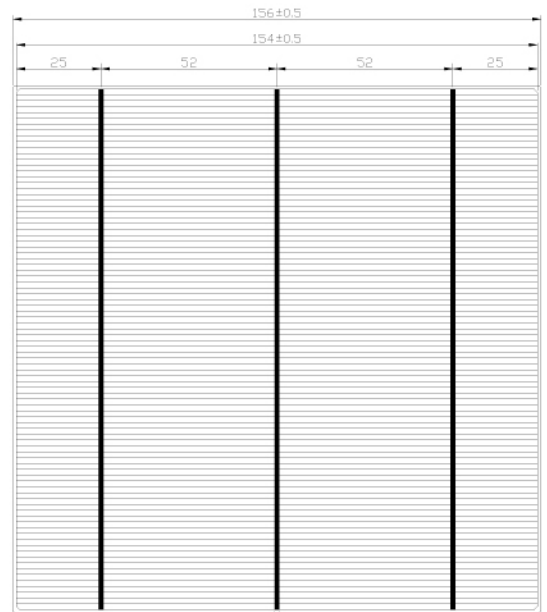


► Features

- > 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		182	180	179	178	177	176	175	174
Efficiency	Eff (%)	18.20	18.00	17.90	17.80	17.70	17.60	17.50	17.40
Power	P _{pm} (W)	4.43	4.38	4.36	4.33	4.31	4.28	4.26	4.23
Max. Power Current	I _{pm} (A)	8.26	8.22	8.20	8.17	8.15	8.12	8.10	8.08
Short Circuit Current	I _{sc} (A)	8.71	8.68	8.66	8.63	8.62	8.60	8.58	8.56
Max. Power Voltage	V _{pm} (V)	0.536	0.533	0.532	0.530	0.529	0.527	0.526	0.524
Open Circuit Voltage	V _{oc} (V)	0.634	0.632	0.631	0.630	0.629	0.627	0.626	0.625

Efficiency Code		173	172	171	170	169	168	166	164
Efficiency	Eff (%)	17.30	17.20	17.10	17.00	16.90	16.80	16.60	16.40
Power	P _{pm} (W)	4.21	4.19	4.16	4.14	4.11	4.09	4.04	3.99
Max. Power Current	I _{pm} (A)	8.06	8.05	8.01	7.99	7.96	7.94	7.90	7.85
Short Circuit Current	I _{sc} (A)	8.55	8.53	8.51	8.49	8.47	8.45	8.41	8.38
Max. Power Voltage	V _{pm} (V)	0.522	0.521	0.519	0.518	0.516	0.515	0.512	0.509
Open Circuit Voltage	V _{oc} (V)	0.623	0.622	0.621	0.620	0.620	0.618	0.616	0.614

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

Temperature Coefficients

Current Temperature Coefficient	α (I _{sc})	0.06%/°C
Voltage Temperature Coefficient	β (V _{oc})	-0.33%/°C
Power Temperature Coefficient	γ (P _{max})	-0.40%/°C

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

Solderability

Peel Strength Minimum > 1.2N/mm

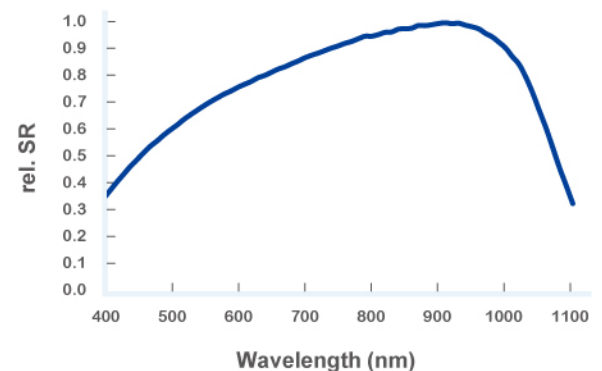
The above can be obtained by soldering iron at 300~400°C with Motech regular flux and ribbon. However, this may vary due to different flux, ribbons, soldering methods and parameters used by the customers.

Light Intensity Dependence

Intensity W/m ²	V _{pm}	I _{pm}
1000	1.000	1.000
800	0.989	0.798
600	0.972	0.597
200	0.911	0.192

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

Spectral Response(SR)



IV Curve

