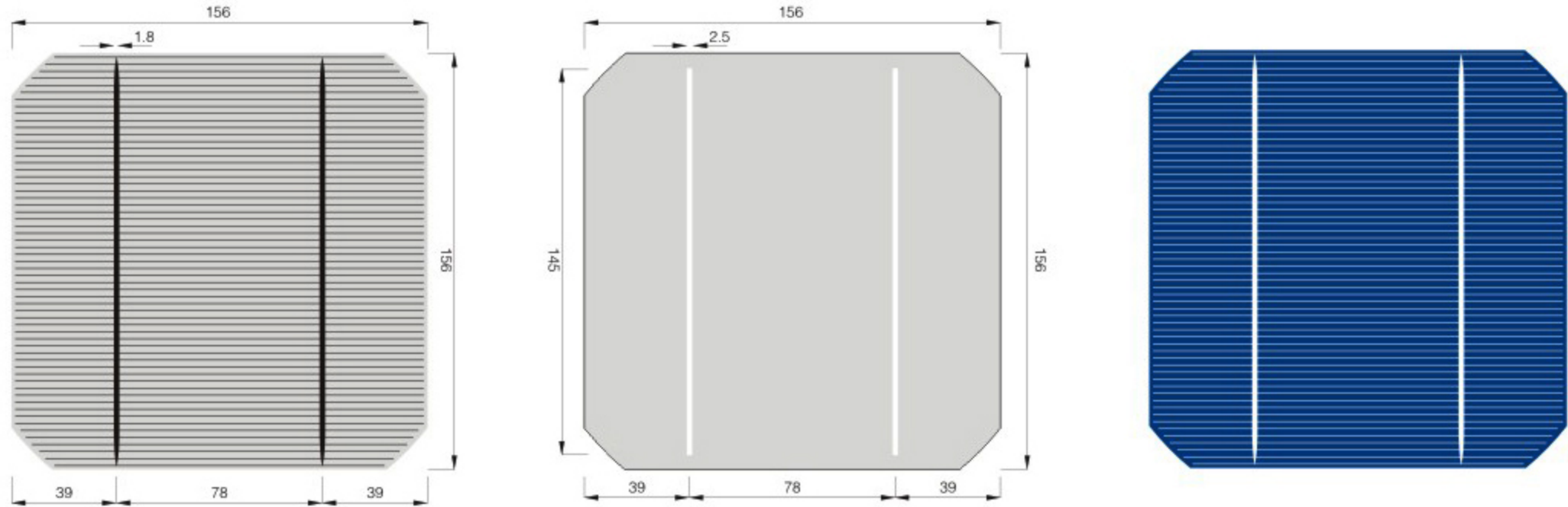


156M-2BB

Front and back contact design



Design and mechanical data

Category: monocrystalline silicon solar cell
 Dimension: pseudo-square 156 mm × 156 mm ± 0.5 mm
 Diagonal: 200 mm ± 1.0 mm
 Thickness: 200 μm ± 20 μm
 Front (-): blue color SiNx antireflection coating
 2 × 1.8 mm silver busbars
 Rear (+): full-surface aluminium back-surface field
 2 × 2.5 mm silver/aluminium soldering pads

Temperature coefficients

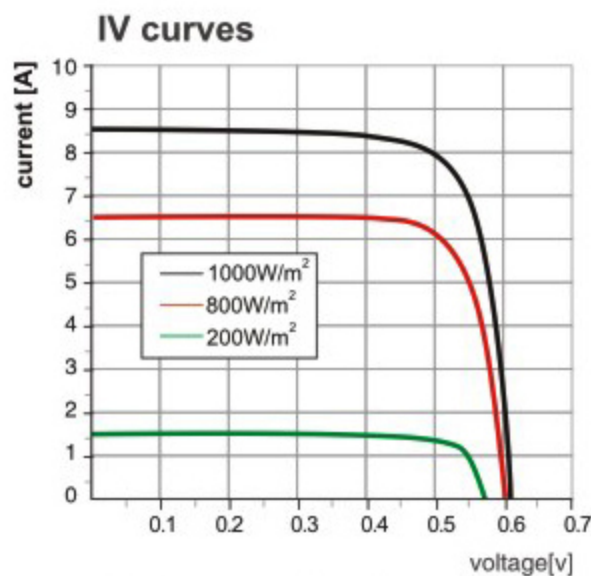
Power: -0.48%/K
 Open circuit voltage: -0.36%/K
 Short circuit current: +0.02%/K

Electrical data

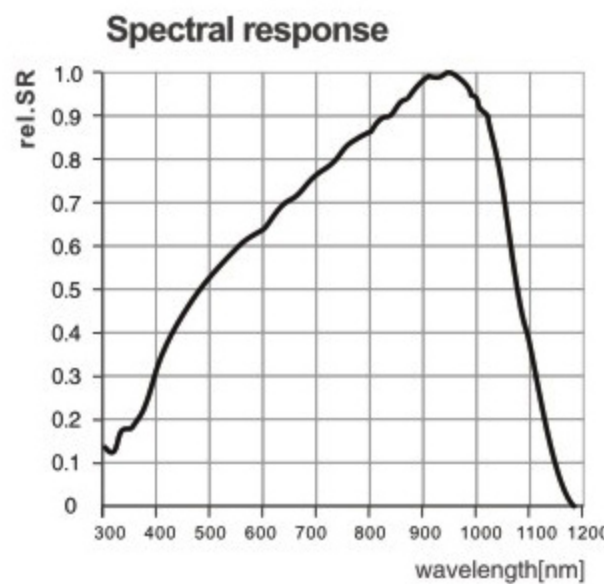
Power class acc. to $I(V_{FIX})$	Efficiency [%]	Power at V_{FIX} [W]	$I(V_{FIX}=515mV)$ [A]	Fill factor [%]	V_{oc} [mV]	I_{sc} [A]
MGS_4450	18,6	4,45	8,7	78,0	630	9,05
MGS_4400	18,4	4,40	8,6	77,8	628	9,00
MGS_4350	18,2	4,35	8,5	77,6	626	8,95
MGS_4300	18,0	4,30	8,4	77,4	624	8,90
MGS_4250	17,8	4,25	8,3	77,2	622	8,85
MGS_4200	17,6	4,20	8,2	77,0	620	8,80

All electrical data measured under standard test conditions: 1000W/m², AM1.5; 25° C; tolerance P: ± 1.5 % rel.
 Current class measurement at $V_{FIX} = 515$ mV. Reverse bias and shunt resistance criteria: $R_{sh} > 15$ Ohm, $I_{rev2} < 1.5A$ at -12V);

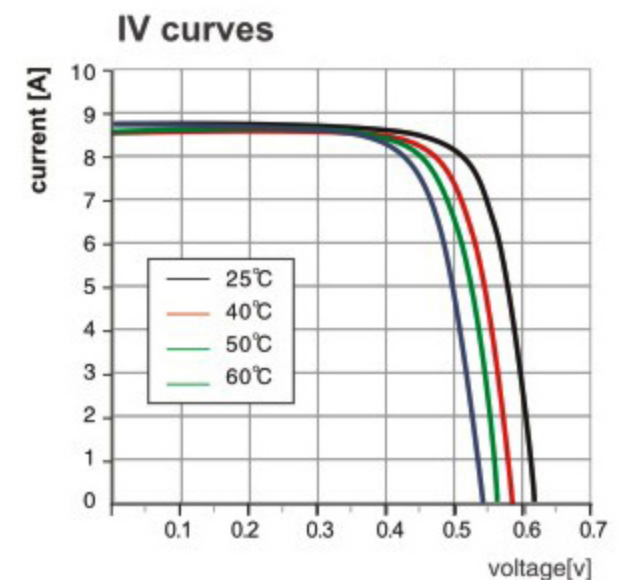
Electrical parameters



IV behavior at various degrees of irradiation intensity



Spectral sensitivity curve



IV behaviour for various temperatures

All data were derived under standard test conditions. Standard test conditions: light spectrum AM = 1.5; irradiation intensity $E = 1000W/m^2$; Cell temperature $T = 25^{\circ}C$.