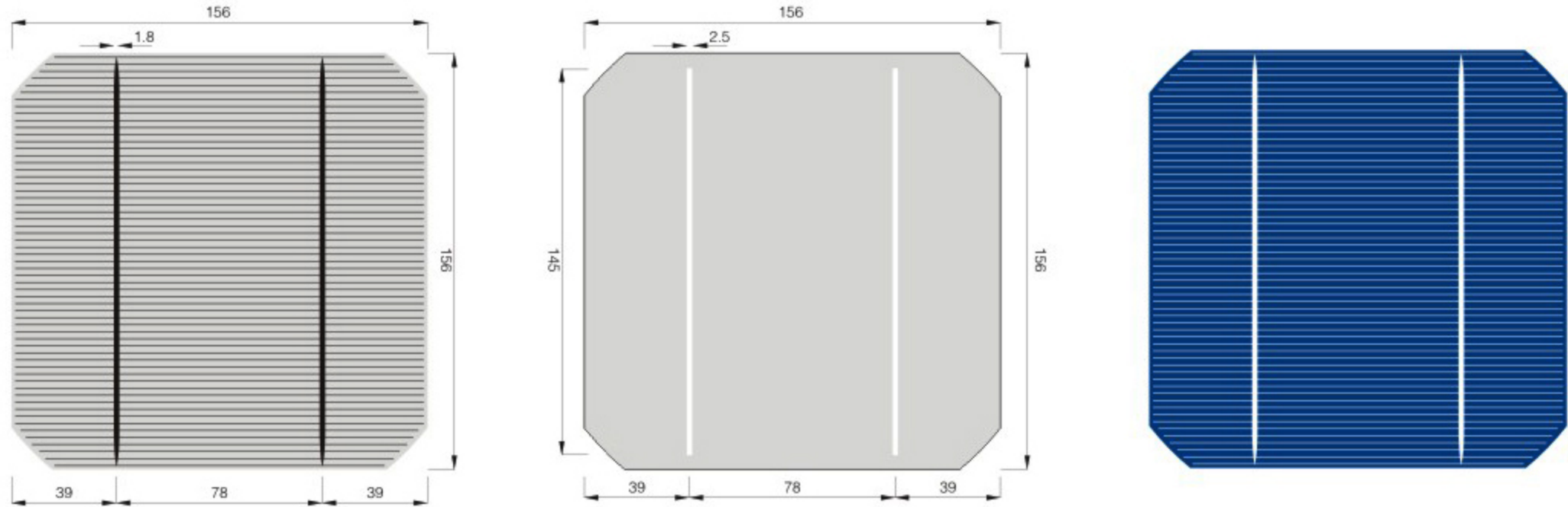


# 156M-2BB

## 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

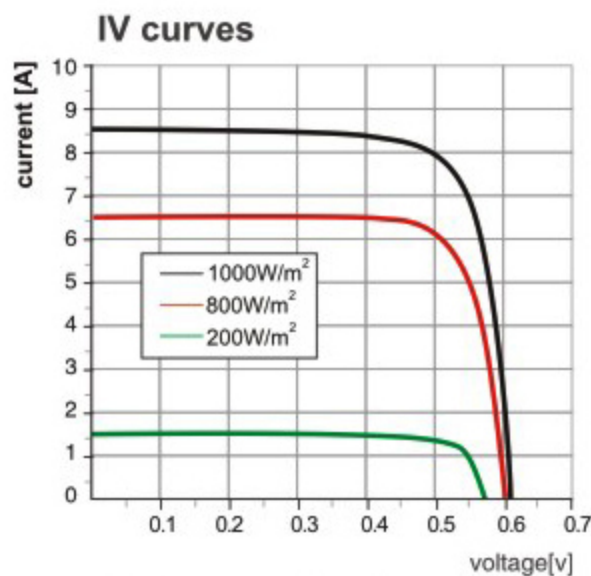
Power: -0.48%/K  
 Open circuit voltage: -0.36%/K  
 Short circuit current: +0.02%/K

## Electrical data

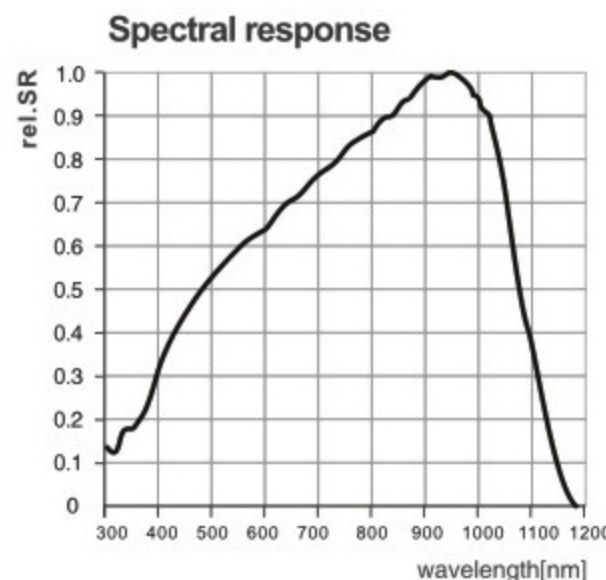
Power class acc. to $I(V_{FIX})$	Efficiency [%]	Power at $V_{FIX}$ [W]	$I(V_{FIX}=515mV)$ [A]	Fill factor [%]	$V_{oc}$ [mV]	$I_{sc}$ [A]
MGS_4450	18,6	4,45	8,7	78,0	630	9,05
MGS_4400	18,4	4,40	8,6	77,8	628	9,00
MGS_4350	18,2	4,35	8,5	77,6	626	8,95
MGS_4300	18,0	4,30	8,4	77,4	624	8,90
MGS_4250	17,8	4,25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

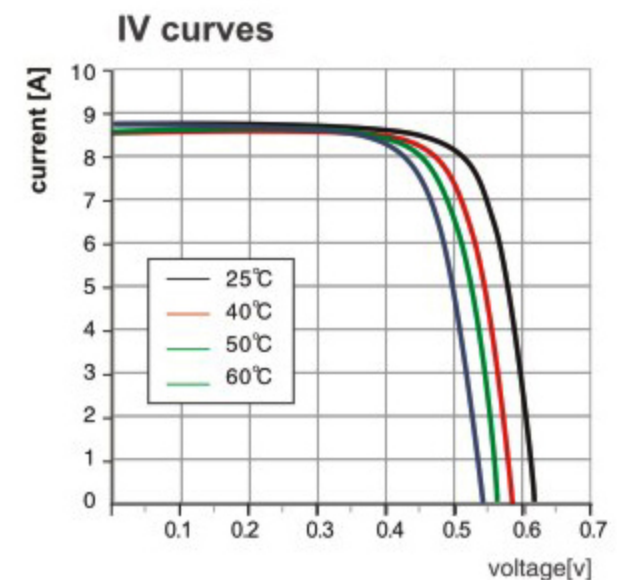
## Electrical parameters



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  $T = 25^{\circ}C$ .