

# 5" Mono-Crystalline Silicon Solar Cell



"Model C, D, E"

## ☀ PHYSICAL CHARACTERISTICS

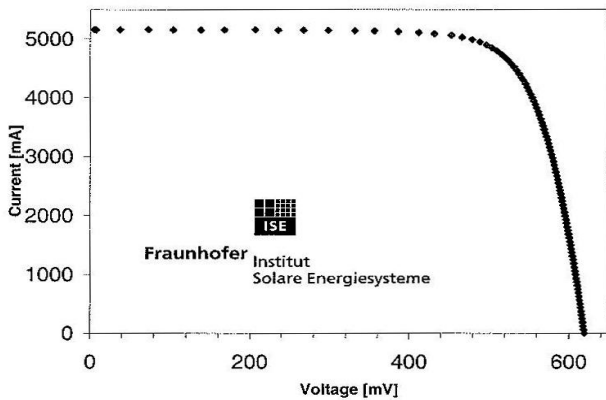
Product : Mono-Crystalline silicon solar cell  
 Dimension : 125 mm x 125 mm ± 0.5 mm Diagonal length 150 ± 1 mm  
 Thickness (Si) : 220 μm ± 30 μm Silicon nitride anti-reflection coating  
 Front Side : 1.45 mm silver busbar Full surface aluminum back surface field  
 Back Side : 4.0 mm (silver/aluminum) continuous soldering pads 61 mm distance between busbars

## ☀ ELECTRICAL CHARACTERISTICS UNDER STANDARD TESTING CONDITIONS (STC)

Model Code::	ES5901E	ES5902D	ES5903C	ES5904C	ES5905C	ES5906C	ES5907C	ES5908C
Color ::	Blue/Dark blue							
Visual ::	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2
Efficiency Class ::	0-7.0	7.0-9.5	9.5-10.8	10.8-11.5	11.5-12.2	12.2-13.5	13.5-14.9	14.9-16.2
Av. Eff [%]	3.50	8.25	10.15	11.15	11.85	12.85	14.20	15.55
Power [W]	0.52	1.23	1.51	1.66	1.76	1.91	2.11	2.31
J <sub>sc</sub> [mA/cm <sup>2</sup> ]	13.93	24.70	30.22	31.30	33.25	31.77	32.04	33.52
I <sub>sc</sub> [A]	2.07	3.67	4.49	4.65	4.94	4.72	4.76	4.98
V <sub>oc</sub> [mV]	540	588	595	602	600	593	595	612
I <sub>mpp</sub> [A]	1.32	2.70	3.23	3.42	3.88	4.00	4.34	4.57
V <sub>mpp</sub> [mV]	394	454	467	485	454	477	486	506
FF [%]	46.52	56.80	56.45	59.18	59.40	68.21	74.49	75.81

STC: 1000W/m<sup>2</sup>, AM1.5, 25°C (combination of electrical parameters depend on used wafer material)

## ☀ I-V CURVE



## ☀ TYPICAL TEMPERATURE COEFFICIENTS

Power : -0.43 %/K  
 Current: +2.00 mA/K  
 Voltage: -3.20 mV/K

## ☀ PACKAGING (1400 PIECES/box)

100 pieces with safety foam are shrink-wrapped in one pack, 14 packs are filled in a protecting box

## ☀ FRONT AND BACK SIDE IMAGE

