

Uber-E Series

S1669BB025

Mono-crystalline PERC PV Cell



FEATURES

- Ultra-Efficient solar cells with an anisotropically etched surface
- Low pressure diffusion with good uniformity
- Silver front contact bars and aluminum local back surface field
- Silicon nitride anti-reflection coating

PHYSICAL CHARACTERISTICS

Substrate material	P-type mono-crystalline silicon wafer-PERC
Cell thickness	175±17.5μm
Dimension	166±0.5mm
Diagonal	223mm±0.5mm
Front(-)	Alkali textured surface, blue silicon nitride AR coating Silver busbars for the front electrodes
Back(+)	Aluminum oxide back-surface field Silver soldering pads for the backside electrodes

PERFORMANCE AND QUALITY

Using Xenon lamp (Irradiance of 1000W/m²,with spectrum AM 1.5) to irradiate test cells, after a total irradiation of 5 kWh/m² ,the degradation mean of maximum output power of cells is ≤2%,Lower cell to module(CTM) power loss: <4%, Potential Induced Degradation(-1000V,96Hrs): <5%



ELECTRICAL CHARACTERISTICS

Grade	Unit	2290	2280	2270	2260	2250	2240	2230	2220	2210	2200
Voc	V	0.680	0.679	0.678	0.677	0.676	0.675	0.674	0.673	0.672	0.671
Isc	A	11.253	11.247	11.233	11.208	11.185	11.172	11.153	11.131	11.115	11.104
Vmp	V	0.594	0.593	0.592	0.591	0.590	0.589	0.587	0.586	0.585	0.584
Imp	A	10.739	10.721	10.700	10.682	10.658	10.628	10.604	10.589	10.553	10.496
Pmax	W	6.28	6.25	6.22	6.20	6.17	6.14	6.11	6.09	6.06	6.03
Efficiency	%	22.9	22.8	22.7	22.6	22.5	22.4	22.3	22.2	22.1	22.0

- Irev2: <1A @-12V Rsh>50Ω, Irradiance of 1000W/m², with spectrum AM 1.5 and a cell temperature of 25°C.
The above data are average figures presently measured. Reference data are calibrated by Fraunhofer ISE. Just for reference.

TEMPERATURE COEFFICIENTS

Voc. Temp. Coef	$-(2.244 \pm 0.005) \text{ mV/K}$
Isc. Temp. Coef	$+(0.024 \pm 0.005) \text{ mA/cm}^2/\text{K}$

PACKAGING AND STORAGE

Heat shrinkable package, with EP foam lining around, reducing the impact of long-distance transportation on products.
After packaging, cells should be stored indoors in the conditions of good ventilation, dry, humidity below 60%, and temperature 40 °C, expiration date : 45 days.

CELL LAYOUT

