# Polycrystalline Cells

PERC Tech

NBS
New Best Solution ®
NBS ENERGY GROUP CO., LTD.

## Model: NBP56CP

Dimension: 156.75 mm x 156.75 mm ± 0.25 mm
Thickness: 200μm ± 20μm

Front (-): 5 x 0.6 mm wide bus bars (silver) with distance 31.2 mm, acid texturized surface with blue silicon nitride AR coating.

Back (+): 1.6 mm wide silver / aluminum soldering pads, aluminum back surface field.Physical Characteristics

### Temperature Coefficients

| | | |
|---|---|---|
| Current Temperature Coefficient | α (Isc) | 0.046 %/°C |
| Voltage Temperature Coefficient | β (Voc) | -0.30 %/°C |
| Power Temperature Coefficnent | γ (Pmax) | -0.37 %/°C |

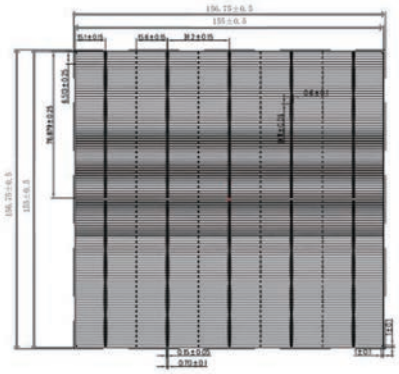
*Standard test condition; AM 1.5, 1000W/㎡, 25°C

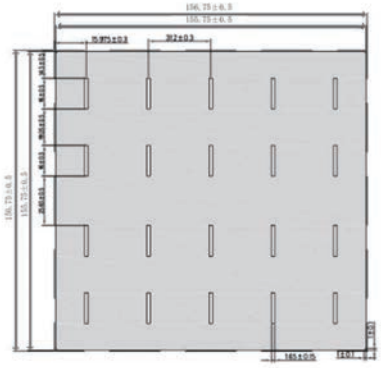
### Electrical Characteristics

| Efficiency | Eff (%) | 18.7~18.8 | 18.8~18.9 | 18.9~19.0 | 19.0~19.1 | 19.1~19.2 | 19.2~19.3 | 19.3~19.4 | 19.4~19.5 | 19.5~19.6 | 19.6~19.7 | 19.7~19.8 | 19.8~19.9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Power | Pmax (W) | 4.61 | 4.63 | 4.66 | 4.68 | 4.7 | 4.73 | 4.75 | 4.78 | 4.8 | 4.83 | 4.85 | 4.88 |
| Max. Power Current | Imp (A) | 8.57 | 8.6 | 8.62 | 8.64 | 8.66 | 8.68 | 8.7 | 8.72 | 8.74 | 8.76 | 8.78 | 8.8 |
| Short Circuit Current | Isc (A) | 9.06 | 9.09 | 9.11 | 9.13 | 9.15 | 9.18 | 9.21 | 9.23 | 9.25 | 9.26 | 9.27 | 9.28 |
| Max. Power Voltage | Vmp (V) | 0.5374 | 0.5387 | 0.5402 | 0.5415 | 0.5428 | 0.544 | 0.5447 | 0.546 | 0.5472 | 0.5487 | 0.5499 | 0.5512 |
| Open Circuit Voltage | Voc (V) | 0.632 | 0.634 | 0.635 | 0.636 | 0.637 | 0.638 | 0.639 | 0.64 | 0.642 | 0.643 | 0.645 | 0.646 |

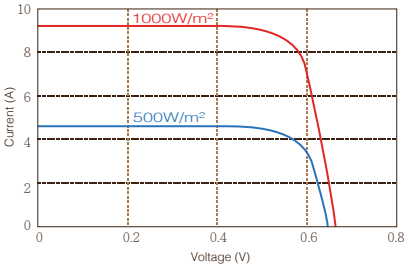
*Data under standard testing conditions (STC): 1000w/㎡, AM1.5, 25°C, efficiency tolerance; average +3%/-0.1% absolute.

### Conductor Partterns (unit: mm)

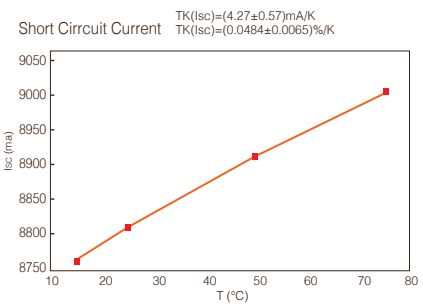




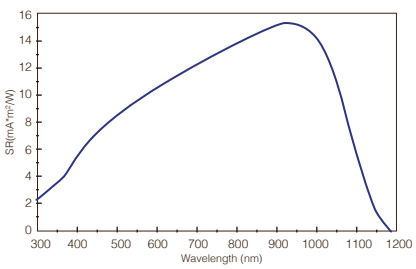
### Typical IV Curve



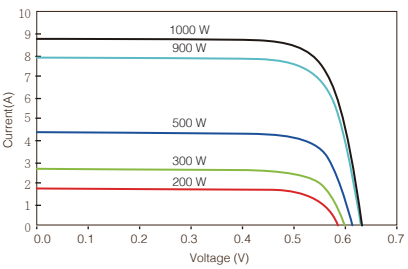

### Calculated Temperature Coefficients




### Typical Spectral Response




### Typical Current-Voltage Curve




Package: Typical package for one carton contains 1,200 cells. The cells are sealed in cell box every 100 PCs.
* The datasheet is for informational purposes only and subject to change without prior notice.