Driving Solar Success: EFFICIENCY

Sponsored by:

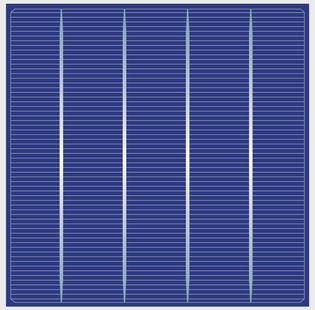
Enabling High-Efficiency Passivated Emitter Rear Cell (PERC)

New DuPont™ Solamet® PV76x Photovoltaic Metallization Paste

- Only front side silver material specifically designed to maximize PERC efficiency that has been demonstrated in production
- Superior contact to enhanced LDEs and high RSheet emitters (Mono & Multi) at significantly lower firing temperatures
- Proprietary tellurium technology further reduces surface recombination losses and junction damage and lowers contact resistance
- Gains exceeding 0.15% efficiency demonstrated in production

Latest Solartech High-Efficiency Multi-Crystalline PERC Solar Cell:	
Efficiency	19.65%
Voc	656.6 mV
Jsc	37.41 mA/cm²
FF	80.02%

DuPont™ Solamet® Integrated Metallization Solutions for PERC
(Solamet® PV76x, PV56x, PV36x)



Data and Image Courtesy of Solartech Corp.

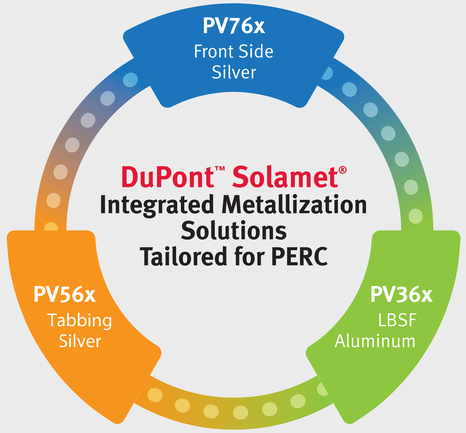
DuPont™ Solamet® Integrated Metallization Solutions for PERC

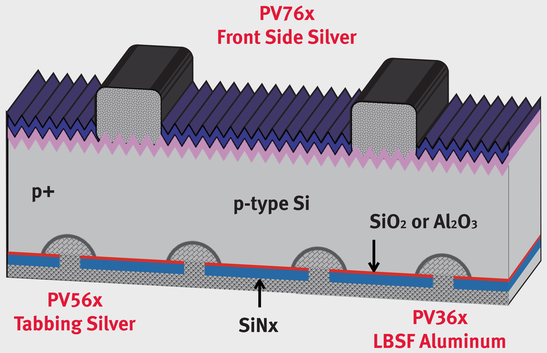
Designed to work synergistically to maximize PERC efficiencies

- Improved Voc from minimized surface recombination without trade-off in fill factor (FF) at lower firing temperatures
- Improved open circuit voltage (Voc) from minimized paste induced rear passivation damage
- Better short circuit current (Jsc) from improved fine line capability
- Good back surface field (BSF) formation on localized contact

Provides proven module reliability

- Demonstrated strong adhesion to passivation layers
- Minimized Kirkendall voids
- Reliable module performance after climate chamber test





PERC Cell Structure