

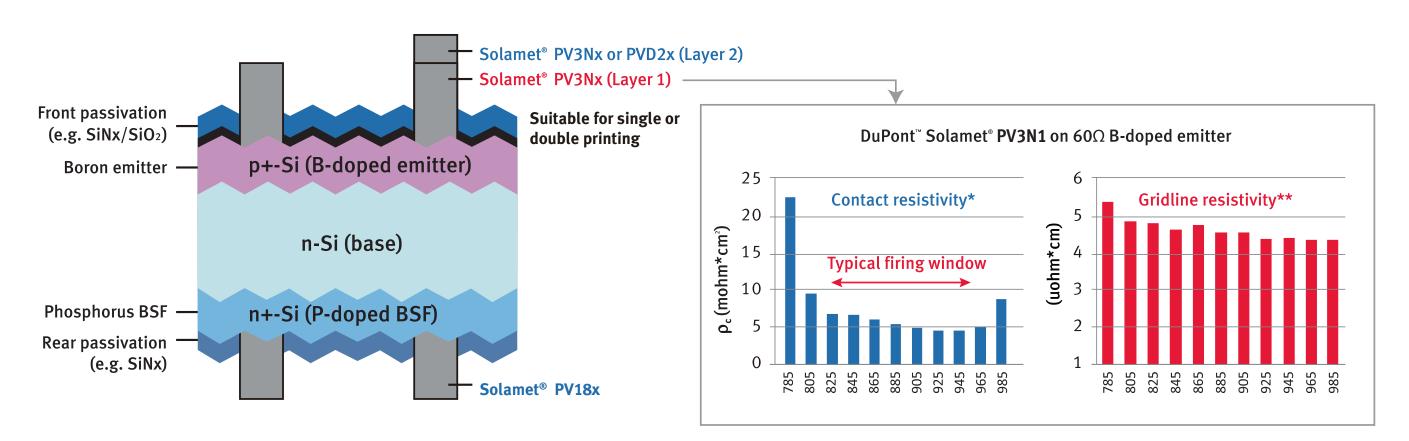
EFFICIENCY

Photovoltaic Metallizations

DuPont™ Solamet® PV3Nx Silver/Aluminum Paste for N-type Cell On Target to Help Boost Cell Efficiency to 22% in 2015

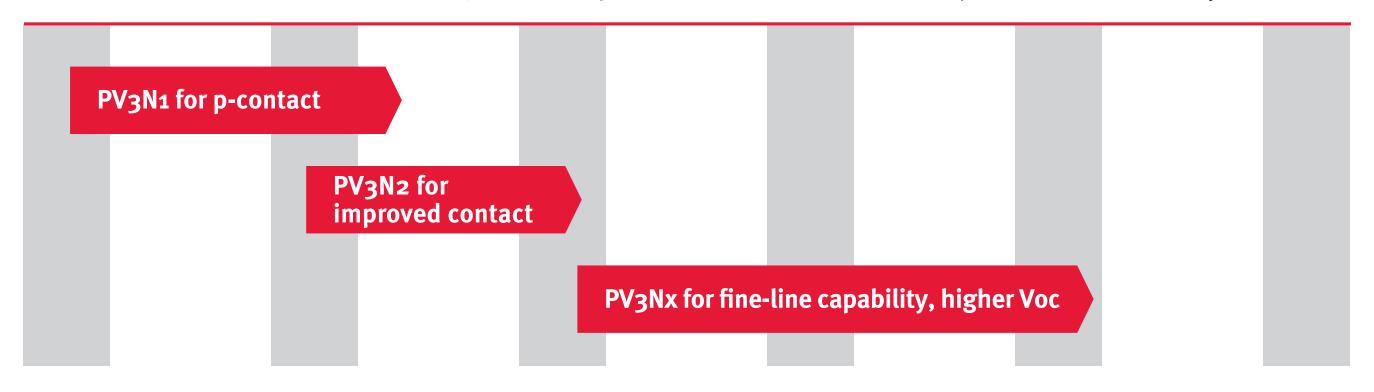
- Fine line printability for grid lines with screen printing
- Fire-through passivation layer
- Better contact on B-doped emitter layer, enabling a broader diffusion process window and low contact resistivity
- Proven technology on double-print design; Flexibility in metallization process selection
- Low gridline resistivity (high conductivity)
- Co-fireable with rear side contacts
- Good solderability and adhesion
- Made without Cadmium
- Proven in use Yingli Solar Panda Series high power module

DuPont™ Solamet® Complete Metallization Package for N-type Cell Enabling Higher Efficiency



DuPont™ Solamet® Product Generation Road Map for N-type Cell

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020



* Measured by TLM.

** Rgi measured on fired-through contacts. Apparent valuse calculated assuming uniform line width and heights. Crossectional areas of fired gridlines measured usunf confocal microscope.