

SHARP.
solar electricity



Photovoltaic Production at SMCA

Randy Johnson

Sr. Director – Solar Engineering

Sharp Manufacturing Corporation of America

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BECOME POWERFUL

Memphis Uses Solar to Produce Solar



Sharp Produces for the U.S. 24 Hrs/day...

- SMCA is Sharp's sole PV manufacturing location in the U.S.
- Every module SMCA produces is sold in the U.S.
- Current manufacturing capacity is near 100 MW, one of largest in the U.S.
- SMCA generally runs production 6 days/wk, 24 hours per day



... with Occasional Interruptions



- Tornado damage was mostly to Administrative building.
- Solar factory was affected, but back up and running in about a week.



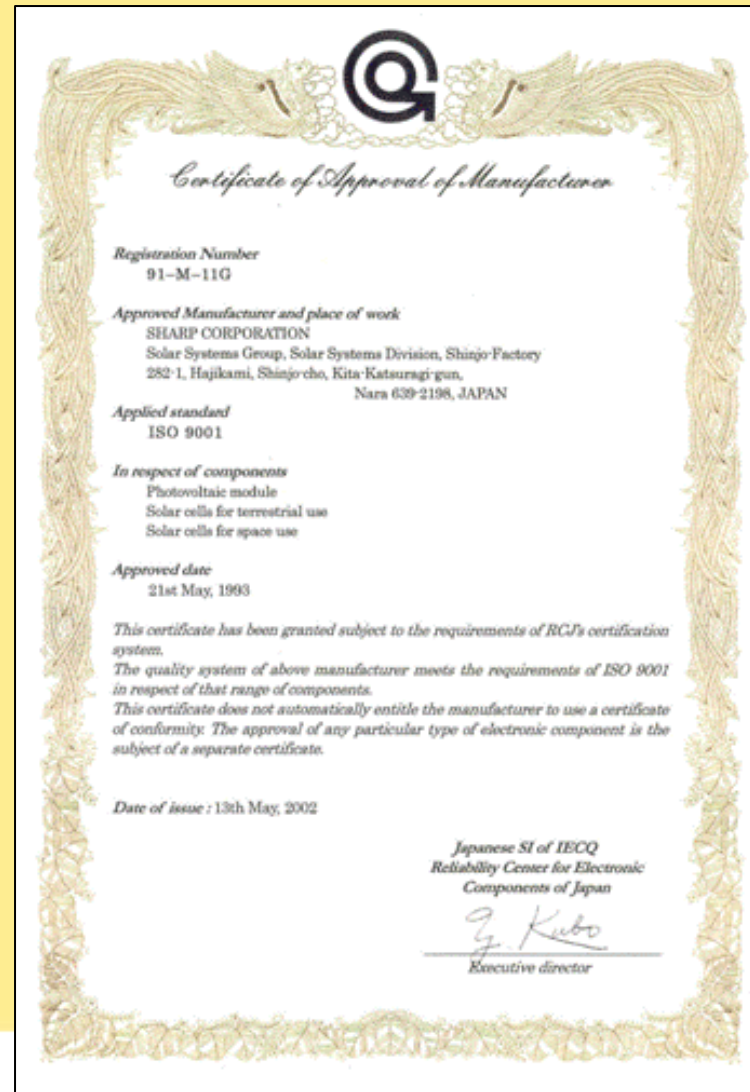
SMCA Production Continues to Improve and Expand



- New inspection processes and product details are providing increased assurance of module quality
- Expectations are for 20% expansion of production in Fiscal 08L

Quality Systems and Employees

- ISO 9001 / 14001
- IBEW Members



SMCA is Focusing on Long Term Reliability



- Going beyond current ISO 9001 certification, SMCA is developing a test laboratory for long term reliability testing of modules and components
- Cell quality is assured by sourcing from Japan only, and maintained by strict quality processes
- On-site environmental and other testing will enable faster testing turnaround

Small and Large Improvements Being Realized



- Increases in cell efficiency are enabling module power improvements: introducing 224 watt module
- Better back-end process equipment translates to cleaner modules and more satisfied employees

Current Product Development

- New framing system is lighter weight and increases stiffness in module depth, providing better protection against cell damage
- New packaging greatly reduces cardboard use and control costs



Product Development in Near Term



- New connectors planned, to respond to the new NEC requirements for lockable connector
- Changes to junction box being reviewed
- Ongoing work with UL to clarify and improve clamp mounting issues

Next Generation of Improvements on the Horizon

- Looking to continued cell efficiency improvement this year
- Expecting new cell technologies in the near future
- Other improvements in packing approach being investigated

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