

SEMI China PV Std. Technical Committee

Thin Film PV Modules Task Force

Yaohua Mai

Team Leader of Thin Film PV Modules Task Force

April 23rd, 2021



CONNECT - COLLABORATE - INNOVATE - GROW - PROSPER

Leaders of Thin Film PV Modules Task Force

| No. | Name | Company | Industry Chain |
|-----|-------------|---------------------|-------------------------|
| 1 | Yaohua Mai | JNU (暨大) | Solar cells and modules |
| 2 | Xinwei Niu | JA Solar (晶澳) | Silicon/ Wafer |
| 3 | Zheng Zhang | Hohai U. (河海) | Solar cells and Modules |
| 4 | Zhenrui Yu | UtMost Light (极电光能) | Perovskite |
| 5 | Ganhua Fu | CNBM (中建材) | CdTe |

Members of Thin Film PV Modules Task Force

| No. | Name | Company | Industry Chain |
|-----|---------------|--------------------|--------------------------------|
| 1 | Yizhong Yao | MQ (纤纳) | Perovskite |
| 2 | Xiaodan Zhang | NKU (南开) | Thin Film PV |
| 3 | Shaohang Wu | JNU (暨大) | Thin Film PV |
| 4 | Haiyan Luo | NPVM (国家光伏检测中心) | Laboratory/ Certification body |
| 5 | Caiyun Chen | NPVM (国家光伏检测中心) | Laboratory/ Certification body |
| 6 | Xiaoman Lu | XNU (信阳师范) | Thin Film PV |
| 7 | Hongyun Jin | Trina Solar (天合) | Silicon / Wafer |
| 8 | Xiaoda Chen | CGC (鉴衡) | Laboratory/ Certification body |
| 9 | Pengfei Qi | RKSolar (中山瑞科) | CdTe |
| 10 | Ganhua Fu | CNBM (中建材) | CdTe |

Members of Thin Film PV Modules Task Force

| No. | Name | Company | Industry Chain |
|-----|--------------|---------------------------------|--------------------------------------|
| 11 | Dongxue Liu | CTG (三峡集团) | Development and Operation/Perovskite |
| 12 | Dalong Zhong | NICE Solar Energy (国家能源集团) | CIGS |
| 13 | Zhen Chen | RongDeTech | Cell/Module/Application |
| 14 | Zhenrui Yu | UtMost Light (极电光能) | Perovskite |
| 15 | Liwei Qian | UtMost Light | Perovskite |
| 16 | Songyuan Dai | NCEPU (华电) | Cell/Module |
| 17 | Tao Yu | NICE Solar Energy (神华) | CIGS |
| 18 | Boyan Li | NICE Solar Energy | CIGS |
| 19 | Tiewei Shang | NICE Solar Energy | CIGS |
| 20 | Yongan Cai | NICE Solar Energy | CIGS |

Members of Thin Film PV Modules Task Force

| No. | Name | Company | Industry Chain |
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| 21 | Xingyu Wang | NICE Solar Energy | CIGS |
| 22 | Bin Fan | GCL (协鑫) | Perovskite |
| 23 | Lei Wang | Sunflare (圣晖莱) | f-CIGS |
| 24 | Zhou Zhang | Sunflare (圣晖莱) | f-CIGS |
| 25 | Zhigang Dai | Sunflare (圣晖莱) | f-CIGS |
| 26 | Sui Dai | NPVM (国家光伏检测中心) | Laboratory/ Certification body |
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Reactivated Document Number: 6401

SNARF for: New Standard: Test Method for Indentation Force of Flexible Thin Film PV Modules

Leader: Lei Wang

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| Yaohua Mai | JNU | Solar cells and modules |
| Shaohang Wu | JNU | Thin Film PV |

Evaluate the ability to withstand the indentation force of the flexible thin film PV module and to ensure the reliability and safety.

Projected Timetable for Completion:

General Milestones

- a. Activity Start: 2018-05-01
- b. 1st Draft by: 2019-05-01
- c. (Optional) Informational Ballot by: 2019-10-01
- d. Letter Ballot by: 2020-03-01
- e. TC Chapter Approval By: 2020-05-01

Reactivated Document Number: 6402
SNARF for: New Standard: Test Method for Vibration Durability of Flexible Thin Film PV Module

Leader: Lei Wang

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Ensure their reliability and safety and to evaluate the capability of flexible thin film PV module to withstand vibration.

Projected Timetable for Completion:

General Milestones

- a. Activity Start: 2018-05-01
- b. 1st Draft by: 2019-05-01
- c. (Optional) Informational Ballot by: 2019-10-01
- d. Letter Ballot by: 2020-01-01
- e. TC Chapter Approval By:2020-03-01

***Reapproval* SEMI PV78-0817**

Test Method for Bending Property of Flexible Thin Film Photovoltaic (PV) Modules

This Standard was technically approved by the Photovoltaic Global Technical Committee. This edition was approved for publication by the global Audits and Reviews Subcommittee on May 16, 2017. Available at www.semiviews.org and www.semi.org in August 2017.

The flexible thin film photovoltaic (PV) modules may bend in the process of installation and transportation. Therefore, a test method is needed to determine the bending property of the flexible thin film PV modules.

This Standard provides a bending performance test method for the flexible thin film PV modules and specifies the scope of application, testing procedures, assessment means, etc.

This Standard describes procedures for the measurement of flexible thin film PV module and severity of test requirements.

This procedure is applicable for flexible thin film PV modules.

Thanks