



# Tyco Electronics Solar Identification Labels

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# Solar Panel Installation Labels

- National Electric Code (NEC) demands proper marking and labeling of solar systems. Tyco Electronics labels are designed to withstand harsh outdoor environments. The labels can be exposed to rain, intense sunlight, UV rays, snow, ice, cold temperature, sand, salt spray and condensation from fog. The solar labels adhere to IEC 61215 / IEC 61646



# Applications & Materials

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- APPLICATIONS
  - Use at the Main Service Disconnect, and DC conduit, raceways, enclosures, cable assemblies and junction boxes on solar photovoltaic installations.
- MATERIALS
  - 3 mil cast PVC film
  - Permanent acrylic adhesive
  - UV resistant over lam when applicable



# Specifications & Approvals

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- Specifications & Approvals
  - **ASTM D 3652** : Physical Construction
  - **ASTM D 3330** : Adhesion
  - **ASTM D 2979** : Adhesion
  - **ASTM D 1000** : Flammability
  - **ASTM D 3759** : Tensile Strength and Elongation
  - **MIL-STD 202G** : Method 215
  - **ASTM D 3424** : Method 4, UV Light exposure
  - **ASTM G85** : Annex 5, Salt Spray - Prohesion
  - **ASTM 81531** : Print Adherence

# Reflective Solar Labels

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- Reflective solar labels are manufactured using retro reflective marking to provide emergency responders with appropriate warning and guidance relative to isolating the solar electric system. The label(s) were designed to be in accordance with the dimensional, functional and verbiage requirements established by the California Fire Marshall's April 2009, Solar Photovoltaic Installation Guideline.



# Applications & Materials

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- APPLICATIONS
  - Use at the Main Service Disconnect, and DC conduit, raceways, enclosures, cable assemblies and junction boxes on solar photovoltaic installations.
- MATERIALS
  - CAUTION SOLAR CIRCUIT : Permanent acrylic adhesive
  - 3 mil cast PVC film
  - UV resistant over lam when applicable



# Specifications & Approvals

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  - **ASTM D 3652** : Physical Construction
  - **ASTM D 3330** : Adhesion
  - **ASTM D 2979** : Adhesion
  - **ASTM D 1000** : Flammability
  - **ASTM D 3759** : Tensile Strength and Elongation
  - **MIL-STD 202G Method 215**
  - **ASTM D 3424 Method 4** : UV Light exposure
  - **ASTM G85 Annex 5** : Salt Spray – Prohesion
  - **ASTM 81531** : Print Adherence
  - **ASTM D4956** : International specifications for reflective materials

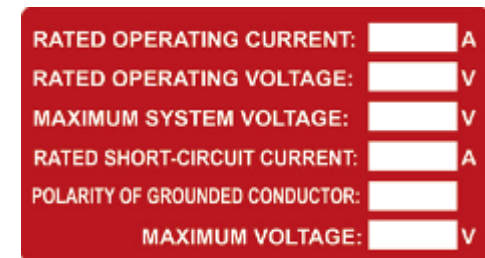
# Solar Rating Labels

- The Solar Rating Labels are designed to meet the industry needs by providing a white printable area to add important system information such as; maximum system voltage and system current. The same robust materials are used in the construction of these labels as with the standard solar identification labels noted above. The system rating data can be added using thermal transfer ink ribbon and printer or by using an indelible marker. For best results, it is recommended to use the UV resistant clear overlamine label over the printed label for further protection.



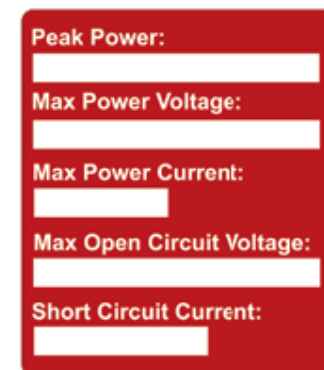
A red rectangular label template with four white input fields. The fields are labeled as follows:

- RATED OPERATING CURRENT: [ ] A
- RATED OPERATING VOLTAGE: [ ] V
- MAXIMUM SYSTEM VOLTAGE: [ ] V
- RATED SHORT-CIRCUIT CURRENT: [ ] A



A red rectangular label template with five white input fields. The fields are labeled as follows:

- RATED OPERATING CURRENT: [ ] A
- RATED OPERATING VOLTAGE: [ ] V
- MAXIMUM SYSTEM VOLTAGE: [ ] V
- RATED SHORT-CIRCUIT CURRENT: [ ] A
- POLARITY OF GROUNDED CONDUCTOR: [ ]
- MAXIMUM VOLTAGE: [ ] V



A red rectangular label template with five white input fields. The fields are labeled as follows:

- Peak Power: [ ]
- Max Power Voltage: [ ]
- Max Power Current: [ ]
- Max Open Circuit Voltage: [ ]
- Short Circuit Current: [ ]



# Applications & Materials

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- APPLICATIONS
  - Use at the Main Service Disconnect, and DC conduit, raceways, enclosures, cable assemblies and junction boxes on solar photovoltaic installations.
- MATERIALS
  - High performance vinyl base material
  - UV resistant ink
  - UV resistant clear lamination

# Specifications & Approvals

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# Additional Information

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- Literature
  - Solar Identification Labels flyer ordering number - 1-1773449-6
- Product Samples
  - Solar Rating Labels, sample ordering number - 3-1773455-6
  - Reflective Labels, sample ordering number - 3-1773455-7
  - Solar Panel Installation, sample ordering number - 8-1773449-6
- Web site
  - <http://www.tycoelectronics.com/products/SolarLabels>

# Contacts

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