### Solar (PV) Application Products

#### 1500 V dc Solar Fuse Products

<table>
<thead>
<tr>
<th>SPFI In-line Series Fuses</th>
<th>SPF Series Fuses</th>
<th>LPHV Series Fuse Holders</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ 1500 V dc • 1–60 A</td>
<td>▪ 1500 V dc • 1–30 A</td>
<td>▪ Touch-safe design offers personnel protection</td>
</tr>
<tr>
<td>▪ UL 248-19 Listed</td>
<td>▪ UL 248-19 Listed</td>
<td>▪ 35 mm DIN-rail mountable</td>
</tr>
<tr>
<td>▪ Meets IEC 60269-6*</td>
<td>▪ Meets IEC 60269-6</td>
<td>▪ Designed to hold SPF 1000 V dc fuses</td>
</tr>
<tr>
<td>▪ Ferrule or PCB mount available</td>
<td>▪ Ferrule or PCB mount available</td>
<td></td>
</tr>
<tr>
<td>▪ Application: inverters and combiner boxes</td>
<td>▪ Applications: combiner boxes, inverters, and battery charge controllers</td>
<td></td>
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<th>LPHV Series Fuse Holders</th>
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<tbody>
<tr>
<td>▪ 1000 V dc • 2–30 A</td>
<td>▪ 1000 V dc • 1–30 A</td>
<td>▪ Touch-safe design offers personnel protection</td>
</tr>
<tr>
<td>▪ UL 248-19 Recognized</td>
<td>▪ UL 248-19 Listed</td>
<td>▪ 35 mm DIN-rail mountable</td>
</tr>
<tr>
<td>▪ Meets IEC 60269-6*</td>
<td>▪ Meets IEC 60269-6</td>
<td>▪ Designed to hold SPF 1000 V dc fuses</td>
</tr>
<tr>
<td>▪ No fuse holder required</td>
<td>▪ Ferrule or PCB mount available</td>
<td></td>
</tr>
<tr>
<td>▪ Application: PV wire harness (eliminate combiner boxes)</td>
<td>▪ Applications: combiner boxes, inverters, and battery charge controllers</td>
<td></td>
</tr>
</tbody>
</table>

#### High-Speed Protection

<table>
<thead>
<tr>
<th>PSR High-Speed Series Fuses</th>
<th>PSX Series High-Speed Square Body Fuses</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ 550–1300 V ac and 500–1000 V dc</td>
<td>▪ 1500 V dc • 80–1400 A</td>
</tr>
<tr>
<td>▪ 40 A–2000 A</td>
<td>▪ Dc breaking capacity up to 200 kA at 1500 V dc</td>
</tr>
<tr>
<td>▪ UL 248-13 Recognized</td>
<td>▪ Available in DIN-mount, flush-end and bolted-blade terminations</td>
</tr>
<tr>
<td>▪ Meets IEC 60269-4</td>
<td>▪ UL248-13 Recognized</td>
</tr>
<tr>
<td>▪ Available in DIN-mount, flush-end and bolted-blade terminations</td>
<td>▪ Meets IEC 60269-4</td>
</tr>
<tr>
<td>▪ Optional remote indication micro-switch available</td>
<td>▪ Optional remote indication micro-switch available</td>
</tr>
<tr>
<td>▪ Application: dc couple PV-BESS central inverters</td>
<td>▪ Application: hybrid PV-BESS inverters</td>
</tr>
</tbody>
</table>

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*Meets electrical performance requirements*
Solar (PV) Application Products

Ground Fault Protection

**SE-601 Series Ground-Fault Relays**
- Provides sensitive ground-fault protection for ungrounded systems
- Application: central inverters

**EL731 Series Earth Leakage Relays**
- Provides sensitive earth-leakage protection for grounded systems
- Application: central inverters

600 V Dc Solar Fuse Products

**IDSR Series Indicator® Fuses**
- 600 V ac/dc
- KLKD UL 248-19 Listed
- Applications: combiner boxes, inverters, battery chargers and high amp power distribution

**KLKD Series 10 x 38 (Midget) Fuses**
- 600 V ac/dc
- Applications: combiner boxes, inverters

**Power Distribution Blocks**
- 600 V ac/dc power distribution blocks with multiple configurations
- UL Recognized
- Application: combiner boxes

Switch Products

**Dc Disconnect Switches**
- 1000 and 1500 V • 250 and 400 A
- Design eliminates need for external bridging links (jumpers) to lower heat dissipation and save installation time
- Applications: combiner boxes, array combiners and string inverters

Overvoltage Protection

**SPD2 PV Series Surge Protective Devices (SPDs)**
- 1100 and 1500 V dc in 3+0 configuration
- Protects equipment from transient overvoltage
- Applications: combiner boxes and inverters

For more information on all surge protective devices visit Littelfuse.com/SPD

Solar Applications

- **String Inverter**
  - 600 V to 1000 V Solar Fuses
  - Touch-Safe Fuse Holders
  - Power Distribution Blocks
  - Surge Protective Devices
  - Dc Disconnect Switches

- **Micro Inverter**
  - TVS Diodes/SCRs

- **Wiring Harness**
  - 1000 V to 1500 V Solar In-Line Fuses

- **Combiner Box**
  - 1000 V to 1500 V Solar Fuses
  - Touch-Safe Fuse Holders
  - Power Distribution Blocks
  - Surge Protective Devices
  - Dc Disconnect Switches

- **Array Combiner**
  - 1000 V to 1500 V Solar Fuses
  - Fuse Blocks
  - Touch-Safe Fuse Holders
  - Surge Protective Devices
  - Dc Disconnect Switches

With over 25 million devices installed in photovoltaic power systems, Littelfuse understands the global challenges of the solar market. We offer numerous circuit-protection products that are uniquely suited to protect the equipment and systems subject to the harsh environments of standard photovoltaic installations. For more information, visit Littelfuse.com/Solar

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