### Features:
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VAC I/O isolation
- Built-in EMI filter, low ripple noise
- Low cost
- High reliability
- 2 years warranty

### Specification

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>SD-100A-5</td>
<td>5V</td>
<td>18A</td>
<td>0 ~ 18A</td>
<td>90W</td>
<td>100mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>2s</td>
<td>20ms (only D mode)</td>
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<td>SD-100B-5</td>
<td>12V</td>
<td>20A</td>
<td>0 ~ 20A</td>
<td>100W</td>
<td>120mVp-p</td>
<td>11 ~ 16VDC</td>
<td>±1.0%</td>
<td>±0.3%</td>
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<tr>
<td>SD-100C-5</td>
<td>24V</td>
<td>8A</td>
<td>0 ~ 8.5A</td>
<td>102W</td>
<td>150mVp-p</td>
<td>23 ~ 30VDC</td>
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<td>SD-100A-12</td>
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<td>18A</td>
<td>0 ~ 18A</td>
<td>100W</td>
<td>120mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
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<td>±0.5%</td>
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<td>20ms (only D mode)</td>
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<td>20A</td>
<td>0 ~ 20A</td>
<td>102W</td>
<td>150mVp-p</td>
<td>11 ~ 16VDC</td>
<td>±1.0%</td>
<td>±0.3%</td>
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<td>SD-100C-12</td>
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<td>±0.3%</td>
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<tr>
<td>SD-100A-24</td>
<td>5V</td>
<td>18A</td>
<td>0 ~ 18A</td>
<td>102W</td>
<td>120mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
<td>±0.5%</td>
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<td>SD-100C-24</td>
<td>24V</td>
<td>8A</td>
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<td>102W</td>
<td>150mVp-p</td>
<td>23 ~ 30VDC</td>
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<td>±0.3%</td>
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<td>SD-100D-24</td>
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<td>18A</td>
<td>0 ~ 18A</td>
<td>102W</td>
<td>120mVp-p</td>
<td>4.5 ~ 5.5VDC</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
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</tbody>
</table>

### Input
- **Voltage Range**: A: 9.5 ~ 18VDC, B: 19 ~ 36VDC, C: 36 ~ 72VDC, D: 72 ~ 144VDC or 85 ~ 132VAC
- **Efficiency (Typ.)**: 78% ~ 90%
- **DC Current (Typ.)**: 9.7A/12V, 4.8A/24V, 2.4A/48V, 1.8A/96V
- **Inrush Current (Typ.)**: D: 18A/96VDC

### Protection
- **Overload**: 105 ~ 135% rated output power
- **Over Voltage**: Protection type: Hiccup mode, recovers automatically after fault condition is removed

### Environment
- **Working Temp.**: -15 ~ +60°C (SD-100B/C/D), -10 ~ +60°C (SD-100A) (Refer to “Derating Curve”)
- **Working Humidity**: 20 ~ 90% RH non-condensing
- **Storage Temp., Humidity**: -20 ~ +85°C, 10 ~ 95% RH non-condensing
- **Temp. Coefficient**: ±0.03%/°C (0 ~ 50°C)
- **Vibration**: 10 ~ 500Hz, 2G, 10min./cycle, 60min. each along X, Y, Z axes

### Safety & EMC
- **Safety Standards**: IEC60950-1 CB approved by TUV (for D type only)
- **Withstand Voltage**: I/P: 1.5kVAC, I/P-FG: 1.5kVAC
- **Isolation Resistance**: I/P: I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH
- **EMC Emission**: Compliance to EN55032 (CISPR32) Class B
- **EMC Immunity**: Compliance to EN61000-4-2, 3, 4, 6.8, 8 light industry level, criteria A

### Others
- **MTBF**: 399.9K hrs min. (SD-100A) 356.7K hrs min. (SD-100B) 355.5K hrs min. (SD-100C) 341.9K Hrs min. (SD-100D)
- **Dimension**: 199*98*38mm (L*W*H)
- **Packing**: 0.65Kg; 20pcs/13.8Kg/0.8CUFT

### Note
1. All parameters NOT specially mentioned are measured at 12.24,48.96VDC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to “EMI testing of component power supplies.” (as available on http://www.meanwell.com)
### Mechanical Specification

- **Case No. 902**
- **Unit:mm**

#### Terminal Pin No. Assignment

<table>
<thead>
<tr>
<th>Pin No.</th>
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</tr>
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<tbody>
<tr>
<td>1,2</td>
<td>DC INPUT V</td>
<td>4,5</td>
<td>DC OUTPUT -V</td>
</tr>
<tr>
<td>3</td>
<td>FG</td>
<td>6,7</td>
<td>DC OUTPUT +V</td>
</tr>
</tbody>
</table>

- **SD-100A,B,C**
- **SD-100D**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
<th>Pin No.</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DC INPUT V+</td>
<td>1,2</td>
<td>AC/DC INPUT</td>
</tr>
<tr>
<td>2</td>
<td>DC INPUT V-</td>
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<td></td>
</tr>
</tbody>
</table>

### Block Diagram

- Fosc: 83KHz
- A-type: 65KHz

100W Single Output DC-DC Converter

SD-100 series