Features
■ Wide operating input voltage range
■ Meets IEC 60950-1, Functional Grade of Insulation
■ RoHS compliant*

Applications
■ TI UCC28880 High voltage switcher
■ AC/DC Power supplies
■ Metering, home automation, appliances, white goods and LED drivers

SM91047EL Series Flyback Transformer

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>L (Pin 9-7) ±15 % @10 kHz / 1 V</th>
<th>Rated Current</th>
<th>Hi-pot</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM91047EL</td>
<td>5.0 mH</td>
<td>0.2 Adc</td>
<td></td>
</tr>
<tr>
<td>SM91047-1EL</td>
<td>3.5 mH</td>
<td>0.3 Adc</td>
<td></td>
</tr>
<tr>
<td>SM91047-2EL</td>
<td>5.0 mH</td>
<td>0.2 Adc</td>
<td></td>
</tr>
</tbody>
</table>

Rated Current
L_{drop} (Pin 9-7) @10 kHz, 1 V ........................................ >85 % L_{0A}
Leakage Inductance @10 kHz, 1 V
Pin 9-7 ........................................................................... 100 μH max. (Pin 2,4 Short)
DCR
Pin 9-7 ........................................................................... 8.0 Ω ±20 %
Pin 2-4 ........................................................................... 104 mΩ ±30 %
Turns Ratio & Polarity @10 kHz, 1 V
Pin 9-7 : Pin 2-4 ............................................................. 11.875 : 1 typ.
Operating Temperature Range ......................................... -40 °C to +125 °C including temperature rise
Storage Temperature Range ............................................. -40 °C to +85 °C

Packaging Specifications
Tape & Reel ...................................................................... 180 pcs./reel

How To Order
Model SM91047 _ E _ L
L (see Electrical Specifications chart)
- Blank = 5 mH, 1.5 kV / 200 V Hi-pot
- 1 = 3.5 mH, 1.5 kV / 1.5 kV Hi-pot
- 2 = 5 mH, 3 kV / 2 kV Hi-pot
Packaging
E = Tape and Reel (180 pcs./reel)
Termination
L = Tin (RoHS Compliant)

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

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SM91047EL Series Flyback Transformer

Retflow Solder Profile

Ramp-up rate = 3 °C/sec. max.
Ramp-down rate = 6 °C/sec. max.
T_L = 217 °C  t_L = 60-150 sec.
T_P = 245 °C ±5 °C
Time within 5°C of actual Peak Temp (T_P) = 20–40 sec.
T_S min = 150 °C  T_S max = 200 °C
T_S min to T_S max = 60-180 sec., 25 °C to Peak Temperature = 6 min. max.

Packaging Specifications

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Users should verify actual device performance in their specific applications.
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