SM91534AL BMS Transformer

Features
- Working voltage up to 1500 VDC
- HI-Pot: 6400 VDC
- Developed for use with NXP model 33771C series and Analog Device’s model AD1818 and LTC6804/681X series
- Design construction: Reinforced insulation between primary and secondary per IEC 62477-1, IEC 60664-1 & IEC 62368-1
- UL recognized per UL 62368-1, File No. E515965
- Creepage distance >15 mm, pollution degree 2, material group CTI I
- Clearance distance >14 mm, Overvoltage Category III
- RoHS compliant* and AEC-Q200 compliant

Additional Information
Click these links for more information:
- PRODUCT
- TECHNICAL
- LIBRARY
- INVENTORY
- SAMPLES
- CONTACT

General Specifications
OCL (100 kHz / 0.1 V)
- (-40 °C ~ +125 °C)............. 150 µH min.
- Leakage Inductance (100 kHz/0.1 V)
  Transformer Side ............. 0.5 Ω max.
  CM Choke Side .............. 0.6 Ω max.
- Turns Ratio .............. 1 : 1 ± 2 %
- Insertion Loss:
  4 MHz.................. -1.0 dB max.
- Return Loss (Z out = 100 Ω)
  4 MHz.................. -20 dB min.
- Common Mode Rejection Ratio
  1~100 MHz.................. -30 dB min.
- Hi-pot (1 mA, 60 S)........... 6400 VDC
- Working Voltage .......... up to 1500 VDC
- Operation temperature
  -40 °C to +125 °C
- Storage Temperature (Component)
  -50 °C to +125 °C
- Moisture Sensitivity Level
  ...................... 1
- ESD Classification (HBM)............. N/A

Packaging Specification
Tape & Reel........... 300 pcs. per 13-inch reel

Watch for this link for more information:
- AUTOMOTIVE

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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WARNING  Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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### Solder Profile

<table>
<thead>
<tr>
<th>Profile Feature</th>
<th>Pb-Free Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Ramp-Up Rate</td>
<td>3 °C / second max.</td>
</tr>
<tr>
<td><strong>PREHEAT:</strong></td>
<td></td>
</tr>
<tr>
<td>Temperature Min. (T_{smin})</td>
<td>150 °C</td>
</tr>
<tr>
<td>Temperature Max. (T_{smax})</td>
<td>200 °C</td>
</tr>
<tr>
<td>Time (T_{smin} to T_{smax})</td>
<td>60~180 seconds</td>
</tr>
<tr>
<td>Liquidus Temperature (T_L)</td>
<td>217 °C</td>
</tr>
<tr>
<td>Time Above Liquidus Temperature (t_L)</td>
<td>60~150 seconds</td>
</tr>
<tr>
<td>Peak Temperature (T_p)</td>
<td>245-250 °C</td>
</tr>
<tr>
<td>Time within 5 °C of Actual Peak Temperature (t_p)</td>
<td>20~40 seconds</td>
</tr>
<tr>
<td>Ramp-Down Rate from Peak Temperature</td>
<td>6 °C / second max</td>
</tr>
<tr>
<td>Time 25 °C to Peak Temperature (T_p)</td>
<td>8 minutes max.</td>
</tr>
<tr>
<td>Do Not Exceed</td>
<td>250 °C</td>
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</table>

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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.

![Diagram of packaging specifications]

**DETAIL A**

**USER DIRECTION OF FEED**

**QTY**: 300 PCS. PER REEL

**DIMENSIONS**:  

<table>
<thead>
<tr>
<th>MM</th>
<th>INCHES</th>
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<tr>
<td>4.00</td>
<td>.157</td>
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<tr>
<td>20.0</td>
<td>.787</td>
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<tr>
<td>56.0</td>
<td>2.205</td>
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</table>

**REV. 04/23**

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