Features
- Operating temperature: -40 to +150 °C
- High frequency integrated choke
- Hi-Pot: 3000 Vrms
- RoHS compliant*
- AEC-Q200 compliant

SM91508AL BMS Signal Transformer

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCL (100 kHz, 0.1 V, -40 °C ~ +150 °C)</td>
<td>300 µH min.</td>
</tr>
<tr>
<td>Leakage Inductance (100 kHz, 0.1 V)</td>
<td>0.5 µH max.</td>
</tr>
<tr>
<td>DCR Transformer Side</td>
<td>0.8 Ω max.</td>
</tr>
<tr>
<td>CM Choke Side</td>
<td>1.0 Ω max.</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>1:1 ±2 %</td>
</tr>
<tr>
<td>1-80 MHz Insertion Loss</td>
<td>1.0 dB max.</td>
</tr>
<tr>
<td>125 MHz Insertion Loss</td>
<td>3.0 dB max.</td>
</tr>
<tr>
<td>Return Loss (Z out = 100 Ω)</td>
<td>-16 dB min.</td>
</tr>
<tr>
<td>1-30 MHz Return Loss</td>
<td>-12 dB min.</td>
</tr>
<tr>
<td>30-60 MHz Return Loss</td>
<td>-10 dB min.</td>
</tr>
<tr>
<td>60-80 MHz Return Loss</td>
<td>-9 dB min.</td>
</tr>
<tr>
<td>Hi-Pot (1 mA, 60 sec.)</td>
<td>3000 Vrms</td>
</tr>
<tr>
<td>Working Voltage</td>
<td>1000 Vdc</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 to +150 °C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-50 to +150 °C</td>
</tr>
</tbody>
</table>

Packaging Specifications
- Tape & Reel: 800 pcs./reel

How To Order
- Model: SM91508 A L - E
- AEC-Q200 Compliant
- Termination: L = RoHS Compliant
- Packaging: E = Tape and Reel (800 pcs. per reel)

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

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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SM91508AL BMS Signal Transformer

Solder Profile

Profile Features | Pb Free Assembly
---|---
Average Ramp-up Rate | 3 °C/second max.
Preheat
Temperature min. (Ts min) | 150 °C
Temperature max. (Ts max) | 200 °C
Time (Ts min. to Ts max.) | 60 ~ 180 s
Liquidus Temperature: TL | 217 °C
Time above Liquidus Temperature: tL | 60 ~ 150 s
Peak Temperature: TP | 245-250 °C
Time within 5 °C of Actual Peak Temperature: tP | 20 ~ 40 s
Ramp-down Rate from Peak Temperature | 6 °C/s max.
Time 25 °C to Peak: tTO PEAK | 8 minutes max.

Average Ramp-up Rate: 3 °C/second max.

Preheat
- Temperature min. (Ts min): 150 °C
- Temperature max. (Ts max): 200 °C
- Time (Ts min. to Ts max.): 60 ~ 180 s
- Liquidus Temperature: TL = 217 °C
- Time above Liquidus Temperature: tL = 60 ~ 150 s
- Peak Temperature: TP = 245-250 °C
- Time within 5 °C of Actual Peak Temperature: tP = 20 ~ 40 s
- Ramp-down Rate from Peak Temperature: 6 °C/s max.
- Time 25 °C to Peak: tTO PEAK = 8 minutes max.
SM91508AL BMS Signal Transformer

Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.

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[Diagram showing dimensions and user direction of feed]
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