Flyback Transformers for Akros AS1135 PoE Controller

- Flyback transformers for IEEE802.3at PoE applications
- Input voltage GA3568: 36 – 57 V; HA3809: 10 – 57 V
- 1500 Vrms isolation from primary and bias to secondary and sync windings.

Core material  Ferrite
Terminations  RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight  11.4 – 11.8 g
Ambient temperature  –40°C to +125°C
Storage temperature  Component: –40°C to +125°C. Packaging: –40°C to +80°C
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging  175 per 13″ reel Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth
PCB washing  Only pure water or alcohol recommended

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A² ±10% (µH)</th>
<th>Inductance at Ipk (µH)</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratios</th>
<th>Ipk (A)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA3568-DL</td>
<td>60</td>
<td>54</td>
<td>0.132</td>
<td>0.0055</td>
<td>0.220</td>
<td>0.200</td>
<td>1.20</td>
</tr>
<tr>
<td>HA3809-AL</td>
<td>30</td>
<td>25</td>
<td>0.042</td>
<td>0.010</td>
<td>0.165</td>
<td>0.165</td>
<td>0.680</td>
</tr>
</tbody>
</table>

1. When ordering, please specify termination and packaging codes:

   HA3809-AL D

   Termination:  L = RoHS tin-silver over tin over nickel over phos bronze.
   Special order:  T = RoHS tin-silver-copper (95.5/0.5) or S = non-RoHS tin-lead (63/37).
   Packaging:  D = 13″ machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel).
   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance is for the primary, measured at 300 kHz, 0.7 Vrms. For the GA3568-AD inductance is per winding.
3. Peak current drawn at minimum input voltage.
4. DCR for the secondary is with the windings connected in parallel. For GA3568-AD DCR for the primary is with both windings connected in parallel.
5. Leakage inductance is for the primary windings with the secondary windings shorted.
6. Turns ratios are for the full primary (pri 3 to pin 1) and with the secondary windings connected in parallel.
7. Output of the secondary is with the windings connected in parallel. Bias winding output is 5 V, 20 mA.
8. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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Specifications subject to change without notice.
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