Bias Injection Choke – KA4909-AL

Developed for use with Texas Instruments DS90UB901Q serial-
izer and DS90UB902Q deserializer for Low-Voltage Differential
Signaling (LVDS) applications.

This center tapped inductor provides over 1 kOhm impedance
from 1 MHz – 800 MHz.

Can be used with additional 10 µH and 1 µH inductors to achieve
even wider band differential signal rejection.

AEC-Q200 Grade 3 (–40°C to +85°C) qualified

Core material Ferrite

Terminations RoHS compliant tin-silver-copper over tin over nickel
over phos bronze.

Weight 220 mg

Ambient temperature –40°C to +105°C

Storage temperature  Component: –40°C to +105°C.

Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second refloows at
+260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 250/7″ reel; 1000/13″ reel Plastic tape: 16 mm wide,
0.35 mm thick, 12 mm pocket spacing, 5.0 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional
aqueous wash. See Doc787_PCB_Washing.pdf.

AEC
Q200 85°C+

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance ±25% (µH)</th>
<th>DCR max (Ohms)</th>
<th>Irms (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KA4909-AL_</td>
<td>169</td>
<td>0.46</td>
<td>650</td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:

Packaging:

C = 7″ machine ready reel. EIA-481 embossed plastic
tape. 250 parts per full reel. Quantities less than full
reel available, in tape (not machine ready) or with
leader and trailer ($25 charge).

D = 13″ machine ready reel. EIA-481 embossed plastic tape.
Factory order only, not stocked (1000 parts per full reel).

B = Less than full reel. In an effort to simplify our part
numbering system, Coilcraft is eliminating the need
for multiple packaging codes. When ordering, simply
change the last letter of your part number from B to C.

2. Inductance tested from pins 1 to 3 at 100 kHz, 0.007 Vrms, 0 Adc.

3. DCR is tested from pins 1 to 3

4. Current that causes a 20°C rise from 25°C ambient.

5. Electrical specifications at 25°C.

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

**Impedance vs Frequency**

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Impedance (kOhms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td>1000</td>
<td>2</td>
</tr>
</tbody>
</table>

**Dimensions are in**

- Inches
- mm

- Recommended Land Pattern

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**Part number**

- KA4909-AL

- KA4909-ALC

- KA4909-ALG

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risk applications without prior Coilcraft approval.
Specification subject to change without notice.
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