Bias Injection Choke – KA4909-AL

Developed for use with Texas Instruments DS90UB901Q serial-ionizer 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 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) 60 per billion hours / 16,666,667 hours, calculated per Telcordia SR-332
Packaging 250/7″ reel; 1000/13″ reel Plastic tape: 16 mm wide, 0.35 mm thick, 5.0 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Inductance tested from pins 1 to 3 at 100 kHz, 0.007 Vrms, 0 Adc.
DCR is tested from pins 1 to 3
Current that causes a 20°C rise from 25°C ambient.
Electrical specifications at 25°C.
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Impedance vs Frequency

Part number1 | Inductance2 | DCR max3 | Irms4 |
---|---|---|---|
KA4909-AL | 169 | 0.46 | 650 |

1. When ordering, please specify packaging code:

**KA4909-AL**

**Packaging:**

- **C** = 7″ machine ready reel. EIA-481 embossed plastic tape, 250 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 C instead.
- **D** = 13″ machine ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

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.