

Very Wideband RF Choke

ADCH-80A+ ADCH-80A

50Ω 50 to 10000 MHz



CASE STYLE: CD542
PRICE: \$2.75 ea. QTY. (20)

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Maximum Ratings

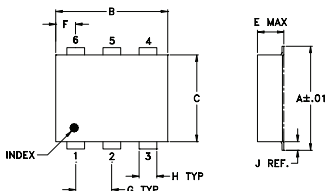
| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| DC Current | 250 mA |

Permanent damage may occur if any of these limits are exceeded.

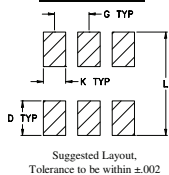
Pin Connections

| | |
|------------|---------|
| RF-IN & DC | 6 |
| DC | 3 |
| NOT USED | 1,2,4,5 |

Outline Drawing



PCB Land Pattern

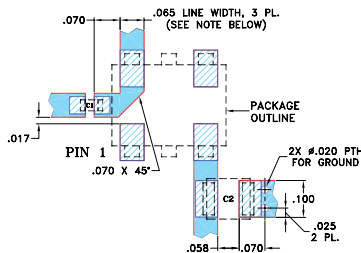


Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G |
|------|------|------|------|------|------|------|
| .272 | .310 | .220 | .100 | .112 | .055 | .100 |
| 6.91 | 7.87 | 5.59 | 2.54 | 2.84 | 1.40 | 2.54 |

| H | J | K | L | wt |
|------|------|------|------|-------|
| .030 | .026 | .065 | .300 | grams |
| 0.76 | 0.66 | 1.65 | 7.62 | 0.20 |

Demo Board MCL P/N: TB-113 Suggested PCB Layout (PL-026)



CAPACITORS: C1: 6800 pF, 0603 SIZE; C2: 1.0 uF, 1311 SIZE.
NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Features

- low parasitic capacitance 0.1 pf typ.
- effective parallel resistance, Rch 800 ohm typ.
- aqueous washable
- protected by US Patent, 6,133,525

Applications

- biasing amplifiers
- biasing of laser diodes

Electrical Specifications

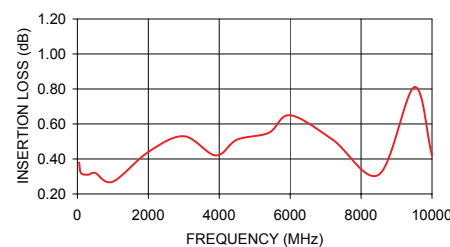
| FREQ. RANGE (MHz) | INSERTION LOSS* (dB) | | VSWR* (:1) | | DC CURRENT (mA) | INDUCTANCE (μH) Typ. | | |
|-------------------|----------------------|------|------------|------|-----------------|----------------------|--------|---------|
| | Typ. | Max. | Typ. | Max. | | @ 0mA | @ 50mA | @ 100mA |
| 50-8000 | 0.3 | 1.0 | 1.1 | 1.35 | 100 | 7.0 | 1.8 | 1.0 |
| 50-10000 | 0.3 | 2.0 | 1.1 | 1.6 | 100 | 7.0 | 1.8 | 1.0 |

*tested with circuit shown below, Zo=50 ohms

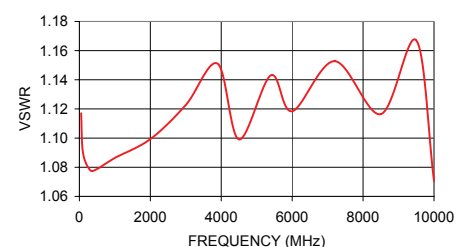
Typical Performance Data

| FREQUENCY (MHz) | INSERTION LOSS (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50.00 | 0.38 | 1.12 |
| 100.00 | 0.32 | 1.09 |
| 300.00 | 0.31 | 1.08 |
| 500.00 | 0.32 | 1.08 |
| 1000.00 | 0.27 | 1.09 |
| 2000.40 | 0.44 | 1.10 |
| 3000.90 | 0.53 | 1.12 |
| 3900.00 | 0.42 | 1.15 |
| 4500.00 | 0.51 | 1.10 |
| 5400.00 | 0.55 | 1.14 |
| 6000.00 | 0.65 | 1.12 |
| 7199.80 | 0.51 | 1.15 |
| 8500.00 | 0.31 | 1.12 |
| 9500.20 | 0.81 | 1.17 |
| 10000.30 | 0.42 | 1.07 |

ADCH-80A
INSERTION LOSS



ADCH-80A
VSWR



electrical schematic

