VERY WIDEBAND

RF Choke

ADCH-80A+

50Ω 50 to 10000 MHz

FEATURES

- Low Parasitic Capacitance, 0.1 pF Typ.
- Effective Parallel Resistance, Rch 800Ω Typ.
- Aqueous Washable
- Protected by US Patent, 6,133,525



Generic photo used for illustration purposes only

CASE STYLE: CD542

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

APPLICATIONS

- Biasing Amplifiers
- Biasing of Laser Diodes
- Biasing of Active Antennas

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Condition	Min.	Typ.	Max.	Unit
Frequency Range		50		10000	MHz
Insertion Loss[1]	50-8000 MHz 50-10000 MHz		0.3 0.3	1.0 2.0	dB
VSWR[1]	50-8000 MHz 50-10000 MHz		1.1 1.1	1.35 1.6	:1
DC Current	50-10000 MHz			100	mA
Inductance	@ 0 mA @ 50 mA @ 100 mA		7.0 1.8 1.0		µH

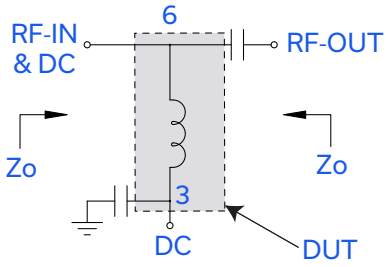
1. Tested with circuit shown below, Zo = 50Ω.

ABSOLUTE 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.

TEST CIRCUIT[1]

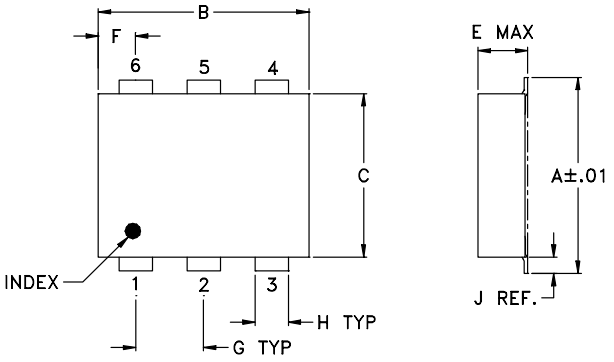


REV. F
ECO-027902
ADCH-80A+
MCL NY
251208

PIN CONNECTIONS

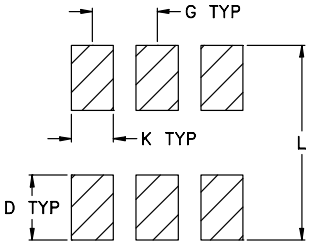
RF-IN & DC	6
DC	3
NOT USED	1,2,4,5

OUTLINE DRAWING



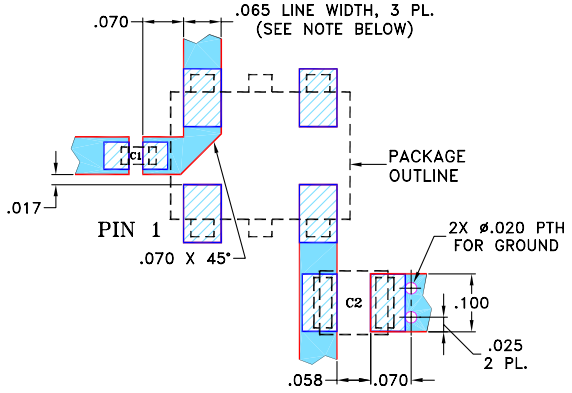
PRODUCT MARKING: N/A

PBC Land Pattern



Suggested Layout,
Tolerence to be within ±.002 in

DEMO BOARD MCL P/N: TB-ADCH-80A+
SUGGESTED PCB LAYOUT (PL-026)



CAPASITORS: 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

OUTLINE DIMENSIONS (Inches / 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

TAPE & REEL INFORMATION: F34

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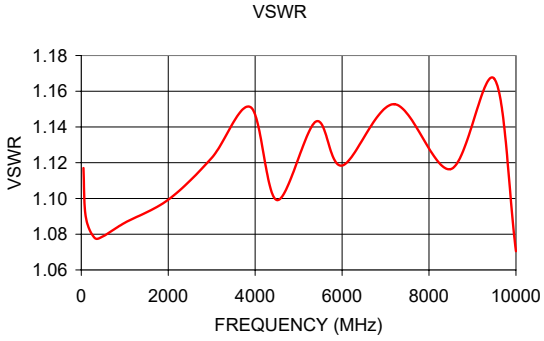
50Ω 50 to 10000 MHz

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50.0	0.38	1.12
100.0	0.32	1.09
300.0	0.31	1.08
500.0	0.32	1.08
1000.0	0.27	1.09
2000.4	0.44	1.10
3000.9	0.53	1.12
3900.0	0.42	1.15
4500.0	0.51	1.10
5400.0	0.55	1.14
6000.0	0.65	1.12
7199.8	0.51	1.15
8500.0	0.31	1.12
9500.2	0.81	1.17
10000.3	0.42	1.07





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/terms/viewterm.html