

Coaxial Frequency Mixer

ZP-11ALH+ ZP-11ALH

Level 10 (LO Power +10 dBm) 1400 to 1900 MHz



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

Coaxial Connections

LO	L
RF	R
IF	X

Features

- low conversion loss, 7.0 dB typ.
- good L-R isolation, 36 dB typ.
- rugged shielded case

Applications

- UHF
- GPS
- instrumentation
- defense communication

BNC version shown

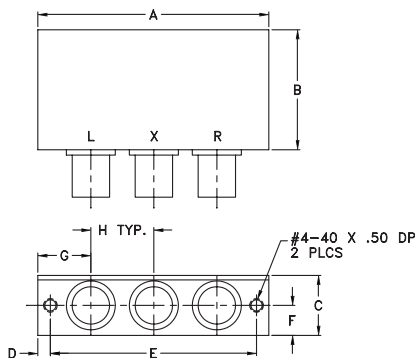
CASE STYLE: GG60

Connectors	Model	Price	Qty.
BNC	ZP-11ALH+	\$45.95 ea.	(1-9)
SMA	ZP-11ALH-S(+)	\$50.95 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	wt
2.31	1.20	.60	.125	2.062	.30	.53	.63	grams
58.67	30.48	15.24	3.18	52.37	7.62	13.46	16.00	75.0

Electrical Specifications

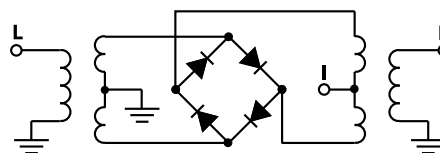
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
		Typ.	Min.	Typ.	Min.
1400-1900	7.0	36	20	28	15

1 dB COMP: +5 dBm typ.

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
1400.00	1350.00	7.64	32.04	35.28	1.80
1439.47	1389.47	7.59	31.29	34.81	1.65
1478.95	1428.95	7.56	31.02	34.41	1.52
1492.11	1442.11	7.57	31.07	34.32	1.47
1505.26	1455.26	7.55	31.07	34.67	1.40
1544.74	1494.74	7.38	30.74	34.43	1.28
1571.05	1521.05	7.27	30.53	34.11	1.19
1584.21	1534.21	7.24	30.45	34.02	1.15
1623.68	1573.68	7.15	30.47	34.30	1.12
1663.16	1613.16	6.99	30.12	35.15	1.07
1676.32	1626.32	7.00	29.89	34.75	1.05
1702.63	1652.63	7.01	29.56	33.82	1.05
1742.11	1692.11	6.97	29.37	32.60	1.06
1768.42	1718.42	6.96	29.26	31.76	1.11
1781.58	1731.58	7.02	29.13	31.35	1.14
1821.05	1771.05	7.06	28.58	30.17	1.21
1860.53	1810.53	7.10	28.45	29.36	1.28
1873.68	1823.68	7.10	28.39	29.09	1.30
1886.84	1836.84	7.08	28.35	28.81	1.32
1900.00	1850.00	7.10	28.25	28.47	1.34

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

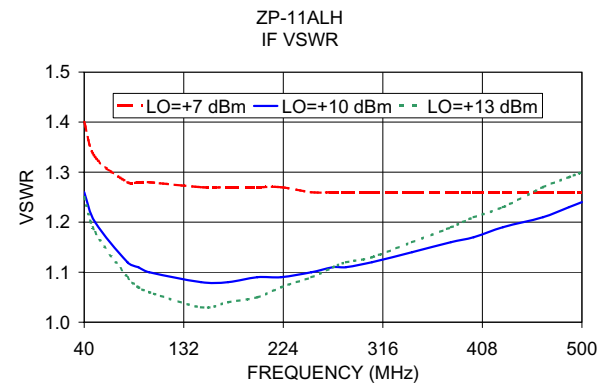
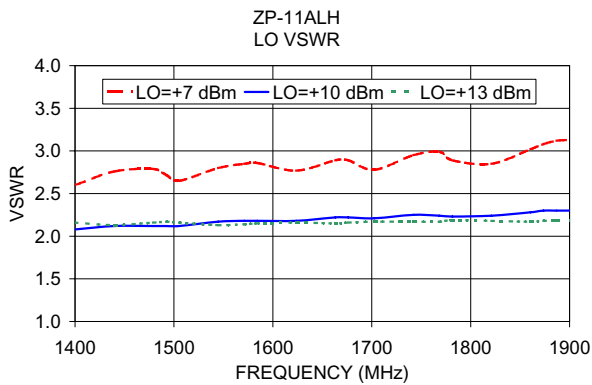
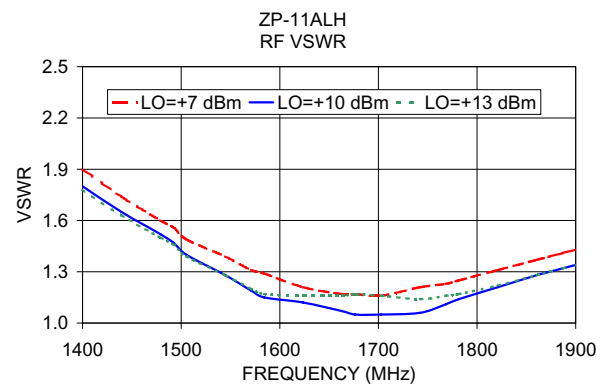
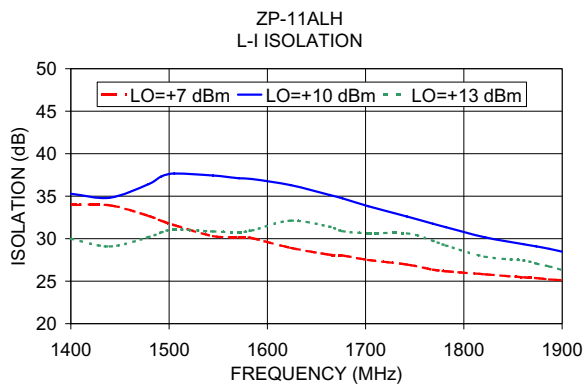
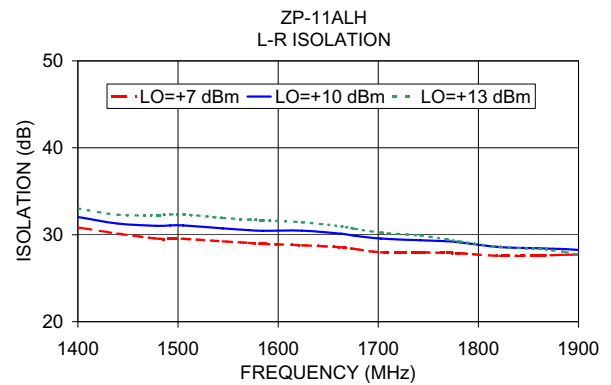
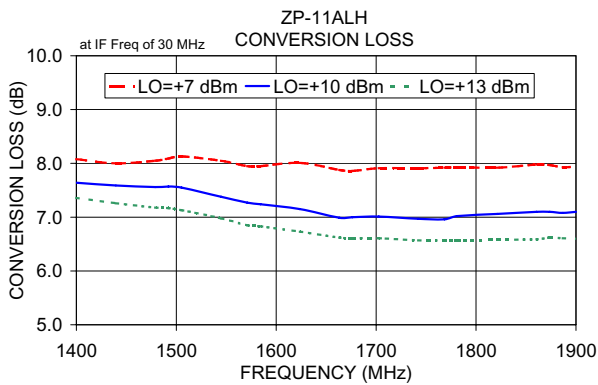
For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp.

REV. B
M98898
ZP-11ALH
DJ/TD/CP/AM
100205
Page 1 of 2

Performance Charts

ZP-11ALH+ ZP-11ALH



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 *The Design Engineers Search Engine* Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

For detailed performance specs & shopping online see web site