

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 3700 to 7000 MHz

ZMX-7GHR



Generic photo used for illustration purposes only

CASE STYLE: BU413

Connectors	Model
SMA	ZMX-7GHR

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

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

Coaxial Connections

LO	2
RF	1
IF	3

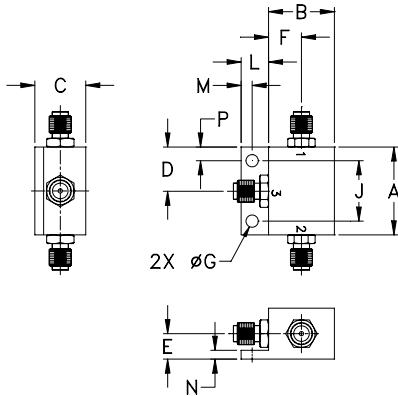
Features

- wide frequency range, 3700 to 7000 MHz
- low conversion loss, 5.3 dB typ.
- good L-R isolation, 33 dB typ., L-I, 34 dB typ.

Applications

- SATCOM
- instrumentation
- defense & federal communications
- SHF

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.00	.75	.58	.50	.29	.38	.140	--
25.40	19.05	14.73	12.70	7.37	9.65	3.56	--
J	K	L	M	N	P	wt	
.687	--	.32	.13	.10	.16	grams	
17.45	--	8.13	3.30	2.54	4.06	25.0	

Electrical Specifications

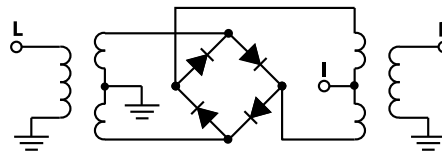
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
		Typ.	Min.	Typ.	Min.
3700-7000	DC-1000	5.3	0.30	8.5	
$f_c - f_u$	\bar{X} σ	Total Range Max.			

1 dB COMP.: +14 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)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
3700.00	3730.00	3.95	31.94	27.92	1.61	1.71
3886.79	3916.79	4.04	29.49	29.05	1.40	1.73
4000.00	4030.00	4.07	31.32	29.24	1.88	1.81
4260.38	4290.38	4.38	38.08	31.10	2.99	1.98
4509.43	4539.43	4.80	35.04	30.94	3.21	1.73
4696.23	4726.23	5.21	31.75	31.14	2.95	1.69
4883.02	4913.02	5.30	31.22	31.93	2.73	1.61
5000.00	4970.00	5.23	32.26	32.82	2.78	1.52
5194.34	5164.34	5.41	32.90	34.00	3.05	1.36
5381.13	5351.13	5.55	31.71	34.53	3.31	1.31
5567.92	5537.92	5.73	30.38	34.46	3.64	1.33
5754.72	5724.72	5.70	31.17	34.72	4.13	1.35
6000.00	5970.00	6.11	30.09	34.77	5.23	1.17
6252.83	6222.83	6.58	29.87	34.26	5.86	1.10
6315.09	6285.09	6.91	30.08	34.24	6.08	1.13
6501.89	6471.89	6.95	30.95	33.65	6.11	1.20
6626.42	6596.42	6.82	30.68	32.90	6.05	1.23
6750.94	6720.94	6.68	29.96	32.03	6.20	1.23
6875.47	6845.47	6.55	29.25	31.16	6.04	1.23
7000.00	6970.00	6.40	28.57	30.32	5.81	1.17

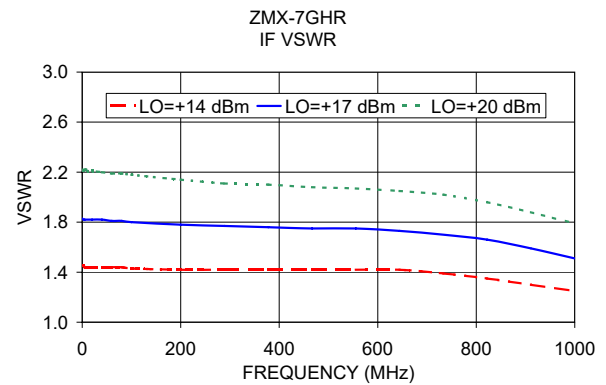
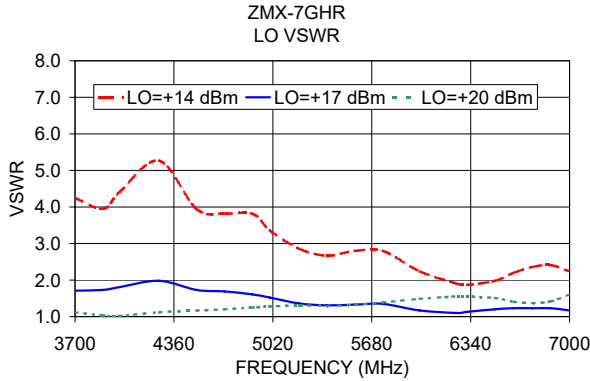
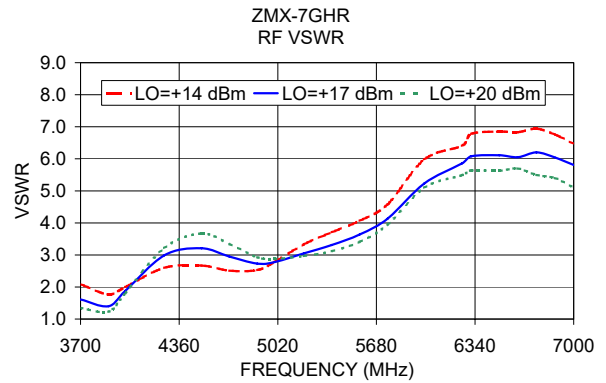
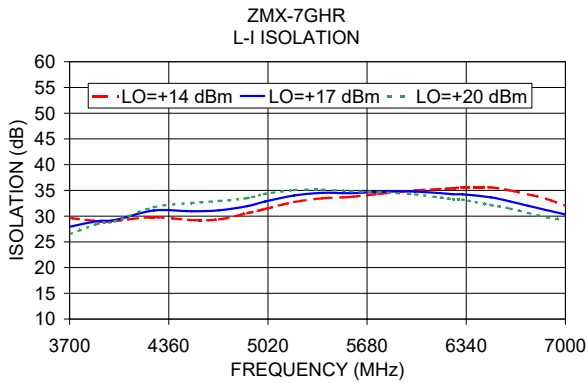
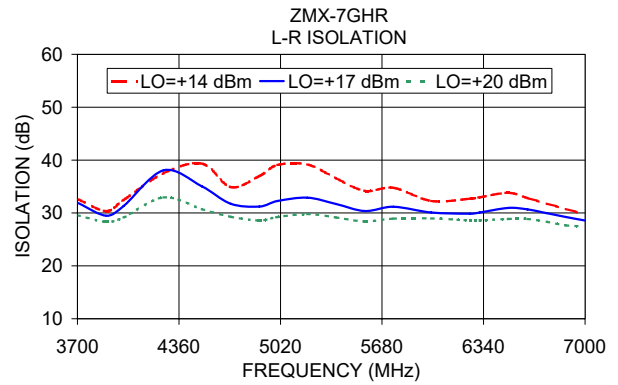
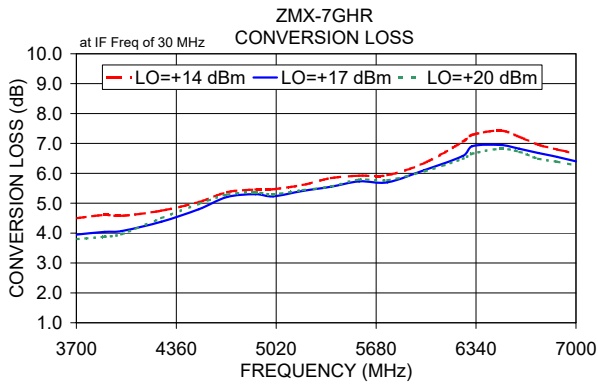
Electrical Schematic



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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





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-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

