Coaxial

Frequency Mixer

ZMX-7GR

Level 7 (LO Power +7 dBm) 3700 to 7000 MHz



CASE STYLE: BU413

Connectors	Model
SMA	ZMX-7GR

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	2
RF	1
IF	3

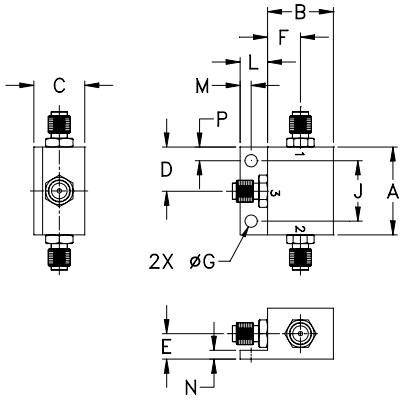
Features

- wide frequency range, 3700 to 7000 MHz
- low conversion loss, 5.0 dB typ.
- high L-I isolation, 36 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

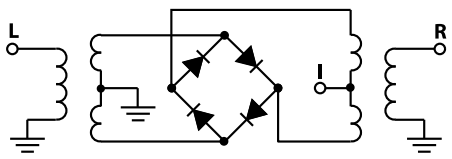
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
LO/RF f_L-f_U	IF	$\overline{X}$	σ	Total Range Max.	Typ.	Min.	Typ.	Min.
3700-7000	DC-1000	5.0	0.30	8.2	30	20	36	20

1 dB COMP.: +1 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 +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
3700.00	3730.00	4.25	30.50	25.89	1.09	1.23
3949.06	3979.06	4.38	29.45	27.95	1.94	1.29
4000.00	4030.00	4.40	29.82	28.13	2.21	1.34
4198.11	4228.11	4.74	31.47	29.71	3.01	1.41
4447.17	4477.17	5.21	32.54	31.21	3.28	1.35
4633.96	4663.96	5.53	30.64	31.84	3.09	1.27
4820.75	4850.75	5.68	30.03	32.73	2.74	1.28
5000.00	4970.00	5.69	30.38	33.91	2.70	1.20
5194.34	5164.34	5.73	30.78	34.92	2.98	1.15
5443.40	5413.40	5.81	30.19	35.19	3.32	1.09
5692.45	5662.45	5.95	30.25	35.33	3.76	1.13
5879.25	5849.25	5.99	30.83	35.33	4.12	1.16
6000.00	5970.00	6.26	30.52	35.10	4.29	1.16
6128.30	6098.30	6.57	30.24	34.77	4.77	1.12
6252.83	6222.83	6.64	29.94	34.14	4.76	1.13
6377.36	6347.36	6.72	29.71	33.58	4.82	1.18
6501.89	6471.89	6.68	29.55	32.81	4.73	1.20
6626.42	6596.42	6.58	29.56	32.09	4.74	1.19
6875.47	6845.47	6.29	28.82	30.49	4.41	1.07
7000.00	6970.00	6.26	28.55	29.90	4.17	1.13

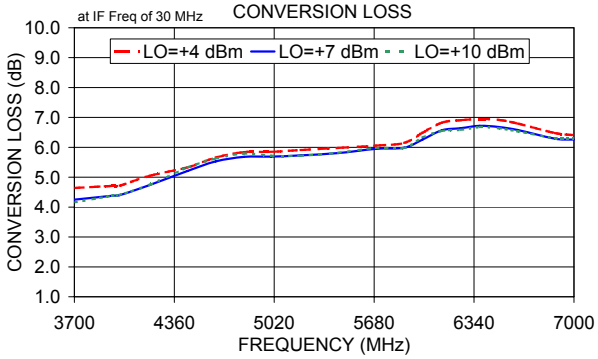
Electrical Schematic



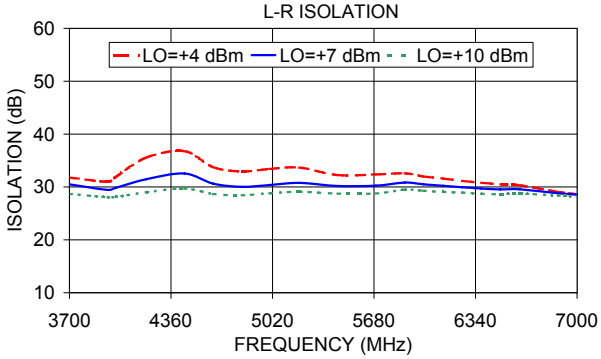
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established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

REV. A
M151107
ZMX-7GR
ED-3937/1
DJ/TD/CP/AM
151009

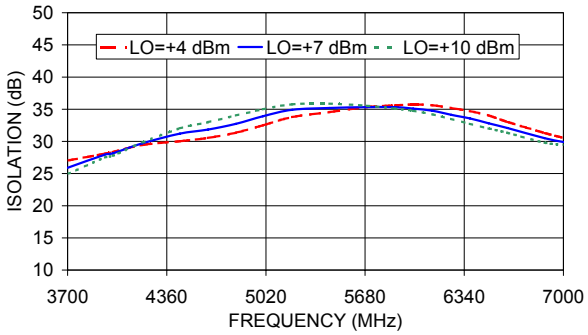
ZMX-7GR
CONVERSION LOSS
at IF Freq of 30 MHz



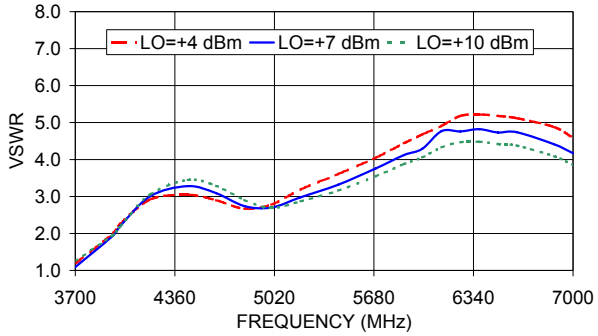
ZMX-7GR
L-R ISOLATION



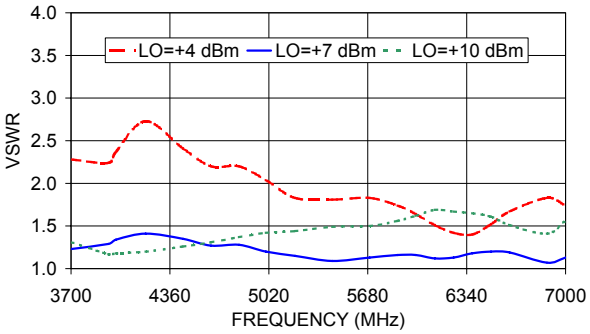
ZMX-7GR
L-I ISOLATION



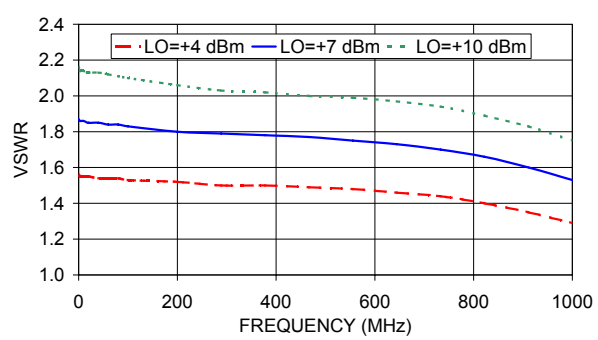
ZMX-7GR
RF VSWR



ZMX-7GR
LO VSWR



ZMX-7GR
IF VSWR



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