

# 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

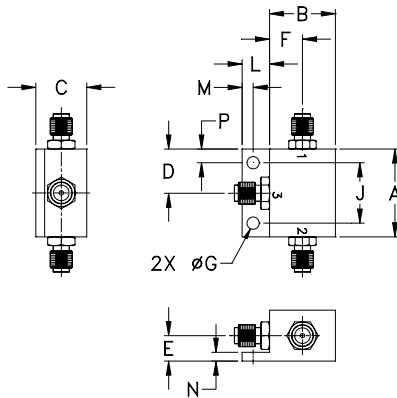
### Features

- 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

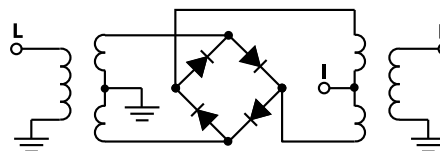
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
		Typ.	Min.	Typ.	Min.
3700-7000	DC-1000	30	20	36	20

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



**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 [www.minicircuits.com](http://www.minicircuits.com) Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

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