

# Coaxial Frequency Mixer

## ZMX-7GLHR

Level 10 (LO Power +10 dBm) 3700 to 7000 MHz

### Maximum Ratings

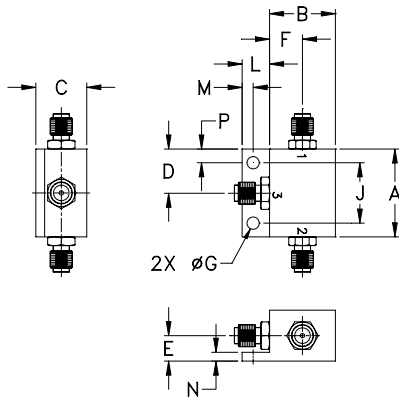
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

### Coaxial Connections

LO	2
RF	1
IF	3

### 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	

### Features

- wide frequency range, 3700 to 7000 MHz
- low conversion loss, 5.4 dB typ.
- high L-I isolation, 35 dB typ.

### Applications

- SATCOM
- instrumentation
- defense & federal communications
- SHF



CASE STYLE: BU413

Connectors	Model
SMA	ZMX-7GLHR

### Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS* (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
		Typ.	Min.	Typ.	Min.
3700-7000	DC-1500	5.4	0.30	8.5	33 20

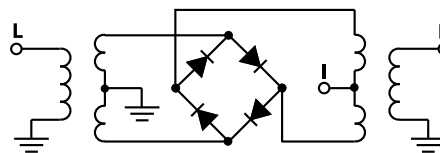
1 dB COMP.: +5 dBm typ.

\* Above 750 MHz IF, conversion loss increases up to 9.8 dB max.

### 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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
3700.00	3730.00	3.99	32.98	27.03	1.50	1.14
3886.79	3916.79	3.98	31.80	28.45	1.27	1.16
4000.00	4030.00	3.92	32.48	28.87	1.51	1.19
4198.11	4228.11	4.06	34.29	30.39	2.05	1.23
4384.91	4414.91	4.31	35.39	30.87	2.33	1.23
4571.70	4601.70	4.33	34.22	31.36	2.22	1.31
4758.49	4788.49	4.75	32.35	31.67	2.02	1.26
5000.00	4970.00	4.61	33.65	33.33	2.15	1.25
5194.34	5164.34	4.63	33.47	34.18	2.27	1.23
5381.13	5351.13	4.74	31.77	34.40	2.30	1.18
5567.92	5537.92	4.92	31.07	34.26	2.39	1.18
5754.72	5724.72	4.88	32.53	34.46	2.75	1.13
5941.51	5911.51	5.30	32.98	34.47	3.27	1.07
6000.00	5970.00	5.39	33.39	34.42	3.38	1.15
6190.57	6160.57	5.57	33.62	34.18	3.79	1.20
6377.36	6347.36	5.82	34.18	33.86	3.91	1.15
6564.15	6534.15	5.93	35.55	33.39	3.98	1.14
6750.94	6720.94	5.72	35.04	32.76	3.86	1.18
6937.74	6907.74	5.62	34.39	32.13	3.74	1.08
7000.00	6970.00	5.62	34.32	32.02	3.64	1.21

### Electrical Schematic



**Mini-Circuits**  
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IF/RF MICROWAVE COMPONENTS

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