

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 3700 to 8000 MHz

Maximum Ratings

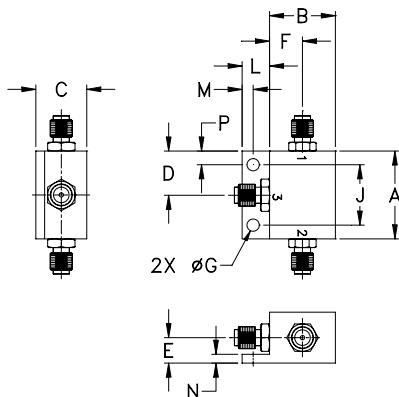
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

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

Coaxial Connections

LO	1
RF	2
IF	3

Outline Drawing



Outline Dimensions (inch)

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 8000 MHz
- low conversion loss, 5.8 dB typ.
- high L-R isolation, 40 dB typ.

Applications

- SATCOM
- instrumentation
- defense & federal communications
- SHF



CASE STYLE: BU413

Connectors	Model
SMA	ZMX-8GH

Electrical Specifications

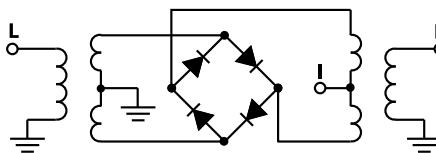
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
LO/RF	IF	f_L - f_U	$\overline{X}$	σ	Total Range Max.	Typ.	Min.	Typ.	Min.	
3700-8000	DC-2000		5.8	0.30	8.5	40	20	18	8	

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	4.92	33.44	12.23	5.02	1.98
3886.79	3916.79	4.99	31.47	12.75	5.42	1.90
4000.00	4030.00	5.03	32.33	13.05	5.47	2.04
4260.38	4290.38	4.94	41.36	14.54	5.55	2.28
4509.43	4539.43	4.87	35.93	14.36	6.15	2.32
4758.49	4788.49	4.82	34.53	15.93	5.69	2.46
5000.00	4970.00	4.34	40.09	17.09	5.09	2.46
5256.60	5226.60	4.34	40.85	17.27	3.30	2.51
5505.66	5475.66	4.30	38.82	18.71	2.15	2.32
5754.72	5724.72	4.42	40.06	18.33	1.77	2.56
6000.00	5970.00	5.20	36.23	18.33	1.74	2.61
6439.62	6409.62	4.38	33.53	17.51	1.73	2.28
6688.68	6658.68	4.17	31.56	17.45	1.64	1.87
7000.00	6970.00	4.42	29.88	17.86	1.59	1.81
7240.00	7210.00	4.51	27.35	17.67	1.55	2.13
7493.33	7463.33	4.39	24.88	17.03	1.40	1.76
7683.33	7653.33	4.71	22.85	16.56	1.25	1.27
7746.67	7716.67	4.97	22.55	17.30	1.13	1.29
7810.00	7780.00	5.05	22.39	17.74	1.10	1.27
8000.00	7970.00	4.96	22.56	21.24	1.08	1.28

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

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