

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 0.0005 to 10 MHz

ZAD-8+



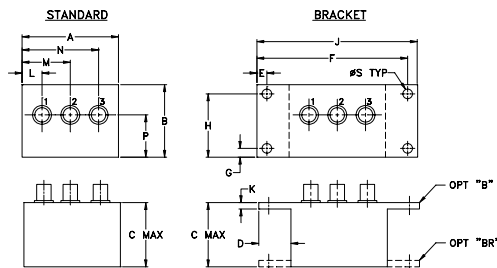
Maximum Ratings

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

Coaxial Connections

LO	1
RF	3
IF	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
2.25	1.38	1.24	.50	.150	3.100	.138	1.238
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45

J	K	L	M	N	P	S	wt
3.25	.10	.40	1.15	1.86	.64	.150	grams
82.55	2.54	10.16	29.21	47.24	16.26	3.81	74.0

Features

- low conversion loss, 5.79 dB typ.
- high L-R & L-I isolation, 50 dB typ.
- rugged shielded case

Applications

- AM radio
- instrumentation

CASE STYLE: M22

Connectors	Model	Price	Qty.
BNC	ZAD-8+	\$54.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band m			Total Range	L		M		U		L		M		U	
f_L - f_U		$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.0005-10	DC-10	5.79	0.05	7.5	8.5	60	50	50	40	45	35	60	50	50	40	45	35

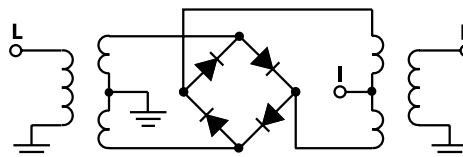
1 dB COMP.: +1 dBm typ.

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	VSWR RF Port (:1)	Frequency		Isolation L-R (dB)	Isolation L-I (dB)
RF	LO			LO	LO		
		LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.001	3.00	5.26	1.41	0.001	3.30	67.32	67.00
0.002	3.00	4.96	1.37	0.002	2.70	67.15	67.00
0.005	3.01	4.92	1.38	0.015	2.54	67.23	67.00
0.010	3.01	4.88	1.37	0.010	2.46	67.03	67.00
0.020	3.02	4.84	1.37	0.020	2.41	66.98	67.00
0.050	3.05	4.84	1.38	0.050	2.32	66.86	67.00
0.100	3.10	4.79	1.38	0.100	2.29	67.00	67.00
0.200	3.20	4.88	1.38	0.200	2.21	67.00	67.00
0.500	3.50	4.86	1.37	0.500	2.10	66.98	67.00
0.700	3.70	4.83	1.37	0.700	1.98	67.00	67.00
1.000	4.00	4.88	1.37	1.000	1.95	66.64	67.00
1.430	4.43	4.91	1.37	1.430	1.94	65.85	67.00
2.000	5.00	4.91	1.36	2.000	1.96	64.48	67.00
2.860	5.86	4.97	1.37	2.860	2.01	57.58	67.00
4.290	7.29	5.16	1.36	4.290	2.03	53.00	67.00
5.000	8.00	5.17	1.36	5.000	2.02	50.13	67.00
6.430	9.43	5.18	1.36	6.430	1.98	48.56	67.00
7.140	4.14	5.21	1.36	7.140	1.94	45.59	67.00
8.570	5.57	5.23	1.36	8.570	1.92	43.14	67.00
10.000	7.00	5.22	1.35	10.000	1.90	42.01	67.00

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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