

# Coaxial Frequency Mixer

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

**ZAD-8+  
ZAD-8**



CASE STYLE: M22

## 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

## Features

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

## Applications

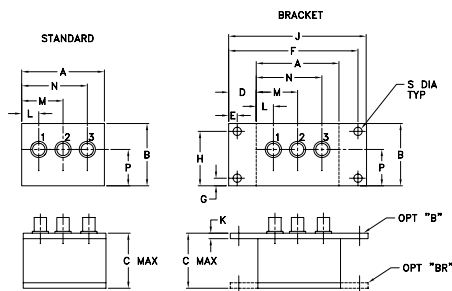
- AM radio
- instrumentation

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 identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

## 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

## Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
		Mid-Band		Total Range				L		M		U	
		$\bar{X}$	$\sigma$	Max.	Max.	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.

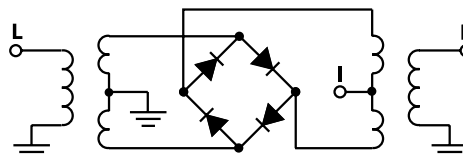
1 dB COMP.: +1 dBm typ.

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

## Electrical Schematic



# Performance Charts

**ZAD-8+**  
**ZAD-8**

