

Coaxial Frequency Mixer

ZAD-8+

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

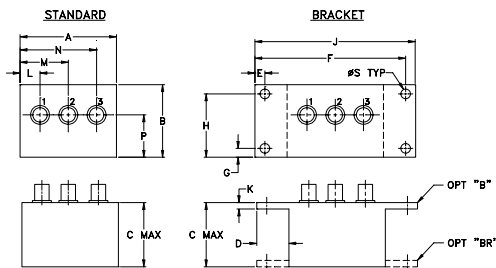
CASE STYLE: M22

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.

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

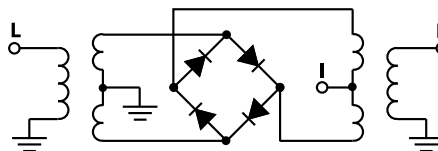
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)									
		L		M		U		L		M		U					
$f_L - f_U$	Mid-Band \bar{m} σ	Typ. Min.		Typ. Min.		Typ. Min.		Typ. Min.		Typ. Min.		Typ. Min.					
0.0005-10	DC-10	5.79	0.05	7.5	8.5	60	50	50	40	45	35	60	50	50	40	45	35

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	VSWR LO Port (:1)	Isolation L-R (dB)	Isolation L-I (dB)
0.001	3.00	5.26	0.001	3.30	71.79	72.81
0.002	3.00	4.96	0.002	2.70	75.56	77.65
0.005	3.01	4.92	0.005	2.54	73.77	80.99
0.010	3.01	4.88	0.010	2.46	71.40	77.86
0.020	3.02	4.84	0.020	2.41	71.40	76.56
0.050	3.05	4.84	0.050	2.32	72.03	78.06
0.100	3.10	4.79	0.100	2.29	71.80	78.10
0.200	3.20	4.88	0.200	2.21	71.48	77.93
0.500	3.50	4.86	0.500	2.10	71.98	77.73
0.700	3.70	4.83	0.700	1.98	71.80	78.54
1.000	4.00	4.88	1.000	1.95	71.65	75.42
1.430	4.43	4.91	1.430	1.94	71.81	71.58
2.000	5.00	4.91	2.000	1.96	72.01	60.03
2.858	5.86	4.97	2.858	2.01	71.64	64.97
4.287	7.29	5.16	4.287	2.03	71.16	59.48
5.001	8.00	5.17	5.001	2.02	71.48	58.45
6.429	9.43	5.18	6.429	1.98	70.78	54.45
7.143	4.14	5.21	7.143	1.94	70.73	53.39
8.572	5.57	5.23	8.572	1.92	70.34	50.80
10.000	7.00	5.22	10.000	1.90	70.20	48.53

Electrical Schematic



Mini-Circuits
 ISO 9001 ISO 14001 AS 9100 CERTIFIED

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