

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 0.025 to 200 MHz

ZAD-3+
ZAD-3



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, 4.61 dB typ.
- high L-R isolation, 45 dB typ.
- rugged shielded case

Applications

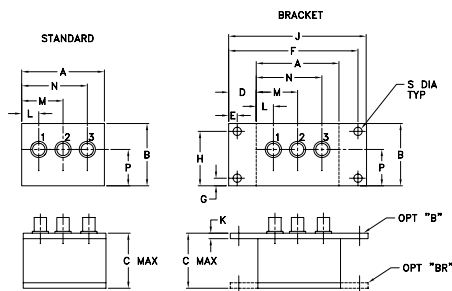
- VHF
- FM radio
- instrumentation

Connectors	Model	Price	Qty.
BNC	ZAD-3(+)	\$45.95 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)

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)					
LO/RF f_L - f_U		Mid-Band m		Total Range Max.		L		M		U		L		M		U	
		\bar{X}	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.025-200		DC-200	4.61	0.06	7.5	8.5	60	50	45	35	35	25	45	35	40	30	20

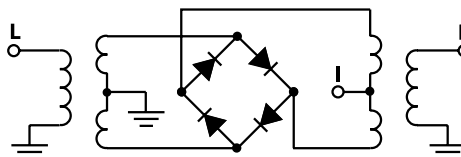
1 dB COMP.: +1 dBm typ.

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

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 +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.03	30.03	6.94	58.72	53.27	1.16	2.06
0.04	30.04	5.80	55.35	51.43	1.17	2.04
0.05	30.05	5.52	54.61	51.09	1.17	2.01
0.10	30.10	5.16	53.51	50.41	1.16	1.99
0.20	30.20	4.98	53.27	50.18	1.16	2.05
0.50	30.50	4.92	53.12	50.13	1.15	2.08
1.00	31.00	4.82	53.18	50.48	1.15	2.07
2.00	32.00	4.77	53.13	50.55	1.14	2.07
5.00	35.00	4.76	53.42	50.99	1.13	2.05
10.00	40.00	4.81	53.68	51.27	1.11	2.02
20.00	50.00	4.87	53.67	50.52	1.10	2.02
38.48	68.48	4.96	53.25	48.52	1.09	2.02
50.00	80.00	4.94	53.49	47.54	1.09	2.03
69.25	99.25	4.90	53.53	45.77	1.08	2.03
84.63	54.63	4.86	53.31	44.13	1.09	2.05
100.00	70.00	4.81	53.55	42.70	1.11	2.07
123.09	93.09	4.87	55.31	40.58	1.13	2.11
153.85	123.85	4.96	52.97	38.04	1.15	2.13
176.93	146.93	5.19	49.53	38.76	1.18	2.14
200.00	170.00	5.28	45.61	38.31	1.21	2.15

Electrical Schematic



Performance Charts

ZAD-3+ ZAD-3

