

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 0.5 to 500 MHz

ZAD-1H+



CASE STYLE: M22

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	3
IF	2

Features

- low conversion loss, 6.16 dB typ.
- good L-R isolation, 45 dB typ., L-I, 40 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation

Connectors	Model	Price	Qty.
BNC	ZAD-1H+	\$48.95 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.

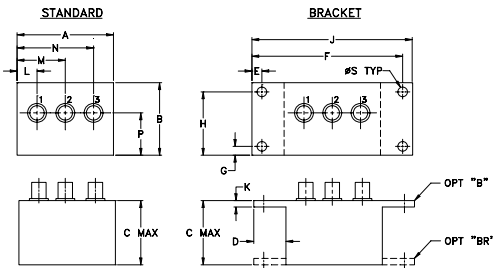
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
	LO/RF	IF	Mid-Band m	Total Range Max.	L		M		U		L		M		U	
f_L - f_U			\bar{X}	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.5-500	DC-500	6.16	0.08	7.5	8.5	50	45	45	30	35	25	45	35	40	30	20

1 dB COMP.: +10 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 $f_U/2$]

Outline Drawing



Outline Dimensions (inch/mm)

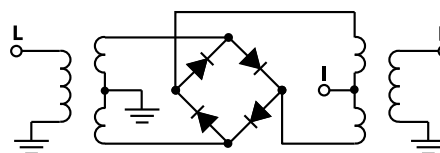
A	B	C	D	E	F	G	H
2.25	1.38	1.24	.50	.150	3.100	.138	1.238
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45

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

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
0.50	30.50	7.38	64.73	58.33	1.26
2.00	32.00	6.29	62.80	57.04	1.13
10.00	40.00	5.89	58.80	53.94	1.08
20.00	50.00	5.93	51.76	47.62	1.09
50.00	80.00	5.91	48.13	44.45	1.10
81.07	51.07	5.84	43.91	40.75	1.12
100.00	70.00	5.82	42.51	39.43	1.12
129.40	99.40	5.85	41.76	38.65	1.14
161.63	131.63	5.90	39.94	37.09	1.16
193.86	163.86	5.98	38.70	35.65	1.17
226.08	196.08	6.10	38.27	35.36	1.18
258.31	228.31	6.01	37.16	34.23	1.24
274.42	244.42	5.97	36.62	33.23	1.26
306.65	276.65	6.07	35.81	32.42	1.26
338.87	308.87	6.16	34.78	30.96	1.33
371.10	341.10	6.34	33.92	29.51	1.34
403.33	373.33	6.42	33.83	28.51	1.36
435.55	405.55	6.60	34.53	28.16	1.39
467.78	437.78	6.76	35.55	28.51	1.40
500.00	470.00	6.85	34.97	28.71	1.42

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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