

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 0.05 to 200 MHz

ZAD-3H+



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, 4.89 dB typ.
- good L-R isolation, 45 dB typ., L-I, 40 dB typ.
- rugged shielded case

Applications

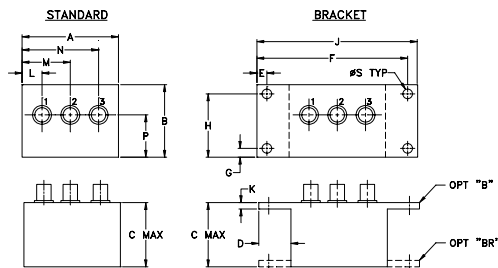
- VHF
- FM radio
- instrumentation

Connectors	Model	Price	Qty.
BNC	ZAD-3H+	\$50.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

+RoHS Compliant

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

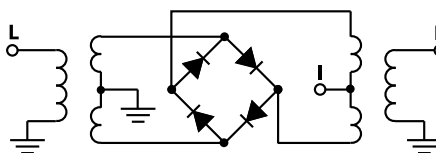
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.		L		M		U		L		M		U	
		$\bar{X}$	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.05-200	DC-200	4.89	0.09	7.0	7.5	55	45	45	30	35	25	45	35	40	30	30	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 $f_U/2$]

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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
0.05	30.05	5.79	61.52	58.47	1.22	2.35
0.20	30.20	5.33	61.30	55.83	1.23	2.27
1.00	31.00	5.25	61.00	55.41	1.22	2.14
5.00	35.00	5.18	58.85	54.15	1.21	2.17
10.00	40.00	5.36	54.85	51.92	1.20	2.19
20.00	50.00	5.40	48.89	47.33	1.20	2.19
41.42	71.42	5.37	41.07	40.89	1.19	2.18
50.00	80.00	5.37	39.79	39.78	1.18	2.27
69.00	99.00	5.34	39.34	38.19	1.15	2.20
89.68	59.68	5.33	38.45	35.45	1.15	2.21
103.47	73.37	5.34	36.25	36.39	1.13	2.14
110.37	80.37	5.37	35.73	35.84	1.13	2.07
117.26	87.26	5.38	35.17	35.59	1.11	2.12
131.05	101.05	5.40	34.48	35.04	1.10	2.15
137.95	107.95	5.42	33.95	34.10	1.10	2.24
151.74	121.74	5.50	32.91	31.97	1.11	2.21
165.53	135.53	5.66	31.97	30.09	1.12	2.17
179.31	149.31	5.76	31.41	28.67	1.14	2.13
193.10	163.10	5.77	31.62	28.17	1.17	2.20
200.00	170.00	5.75	32.02	28.21	1.19	2.23

Electrical Schematic



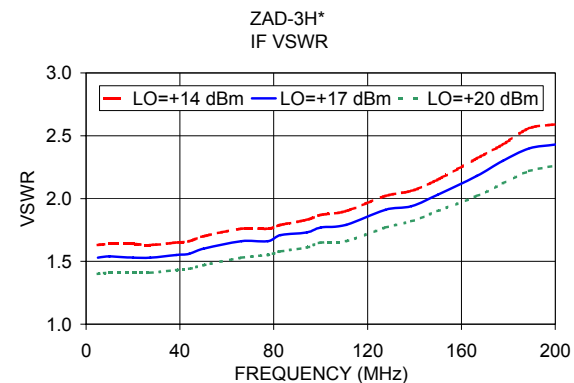
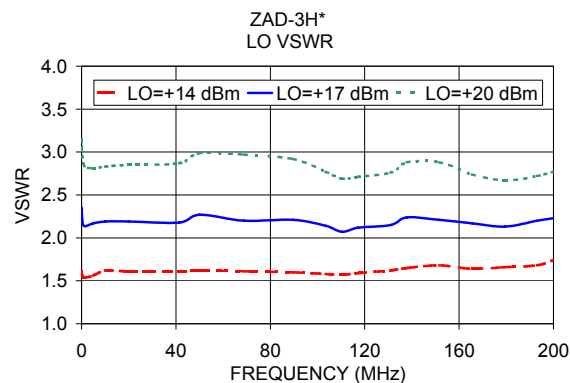
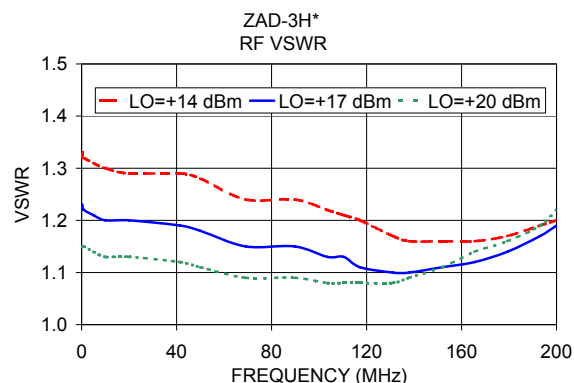
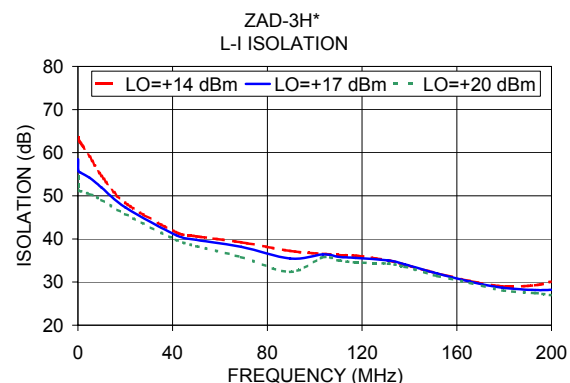
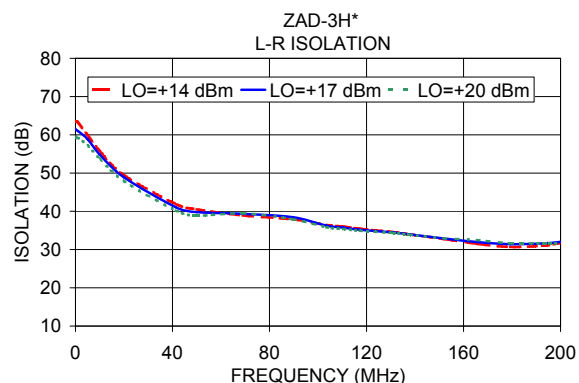
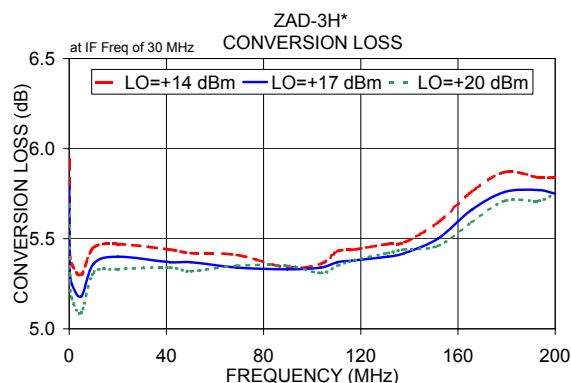
Notes

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