

Coaxial Frequency Mixer

ZAD-3H+

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

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



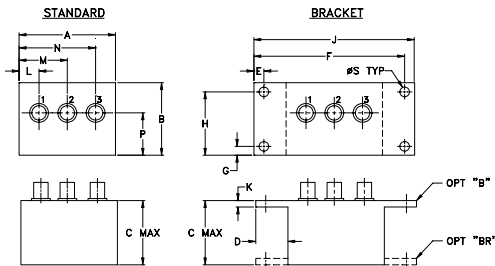
CASE STYLE: M22

Connectors	Model
BNC	ZAD-3H+
BRACKET (OPTION "B")	
BRACKET (OPTION "BR")	

+RoHS Compliant

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

Outline Drawing



Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		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

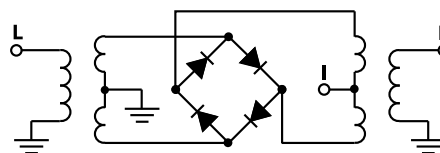
1 dB COMP.: +10 dBm typ.

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

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

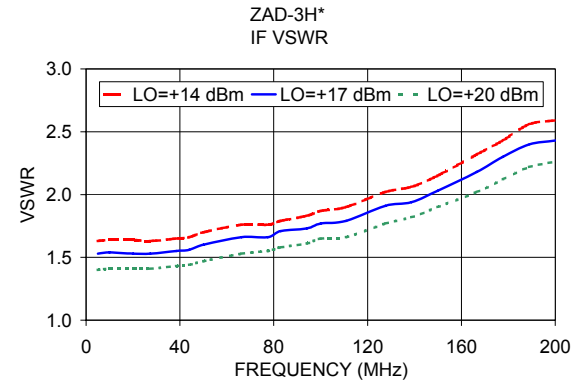
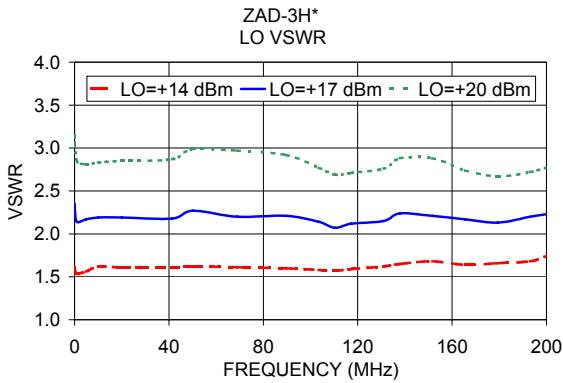
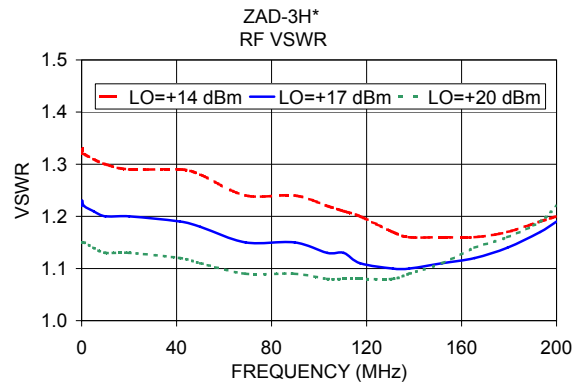
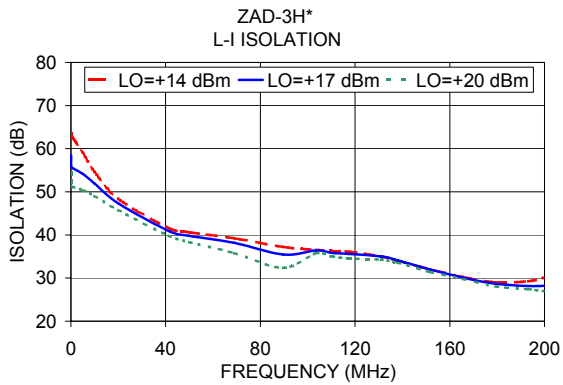
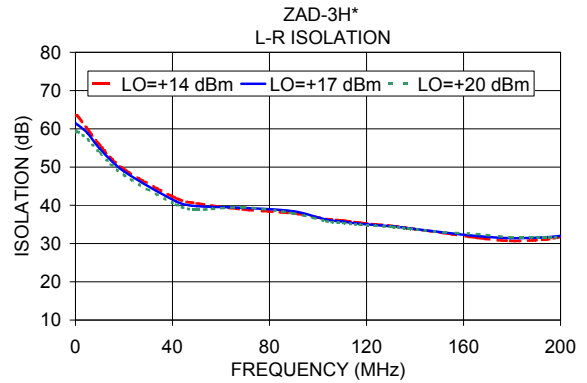
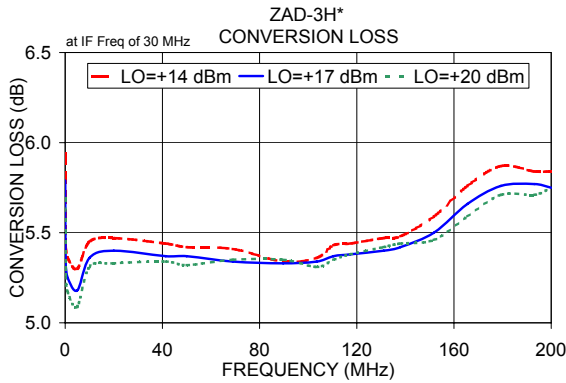
Electrical Schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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