

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 1 to 1000 MHz

ZAD-2+



CASE STYLE: M22

Connectors	Model
BNC	ZAD-2+
BRACKET (OPTION "B")	
BRACKET (OPTION "BR")	

+RoHS Compliant

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

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

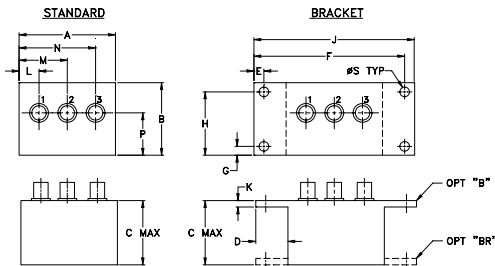
Features

- low conversion loss, 5.66 dB typ.
- good isolation, 35 dB typ.
- wideband, 1 to 1000 MHz
- rugged shielded case

Applications

- cellular
- VHF/UHF
- instrumentation

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	IF	Mid-Band		Total Range		L		M		U		L		M		U		
f_L - f_U	\bar{X}	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
1-1000	0.5-500	5.66	0.07	7.5	8.5	45	30	35	20	30	20	45	30	35	20	30	20	

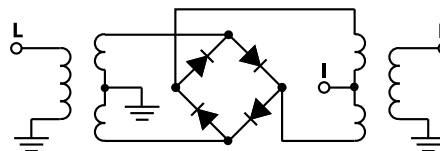
1 dB COMP.: +1 dBm typ.

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)	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
1.00	31.00	5.81	62.40	66.60	1.73	3.13
10.00	40.00	5.74	67.00	67.00	1.73	2.99
20.00	50.00	5.87	63.37	67.00	1.73	3.08
50.00	80.00	5.77	55.36	58.05	1.74	2.94
100.00	70.00	5.79	49.04	52.36	1.80	2.86
160.32	130.32	5.85	45.18	48.76	1.86	2.78
200.00	170.00	5.92	43.67	47.23	1.97	2.72
284.57	254.57	5.95	41.08	44.56	2.06	2.74
346.69	316.69	6.00	39.04	43.59	2.17	2.74
408.82	378.82	6.15	36.94	43.85	2.23	2.85
500.00	470.00	6.25	35.65	41.57	2.21	2.86
533.07	503.07	6.19	34.41	42.87	2.11	2.92
595.20	565.20	5.96	33.15	37.76	1.98	2.94
688.39	658.39	5.57	31.77	38.59	1.78	3.02
750.51	720.51	5.59	30.90	40.39	1.66	3.13
800.00	770.00	5.60	30.50	41.73	1.56	3.33
843.70	813.70	5.64	30.24	41.84	1.55	3.40
905.83	875.83	5.62	28.94	47.26	1.57	3.45
967.95	937.95	5.81	28.12	35.84	1.56	3.47
1000.00	970.00	6.10	27.73	32.72	1.41	3.30

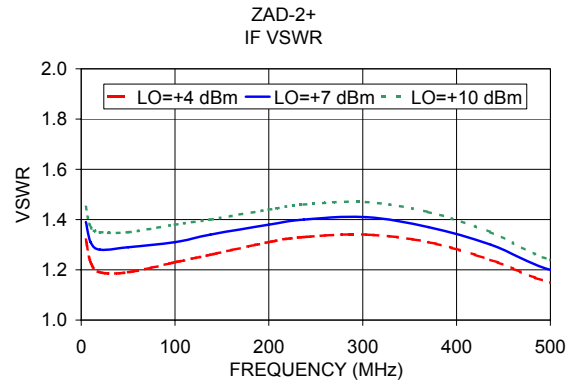
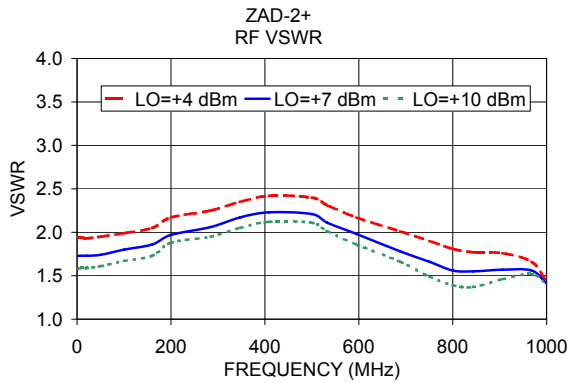
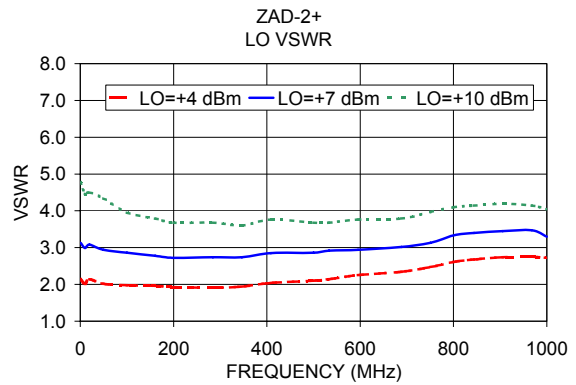
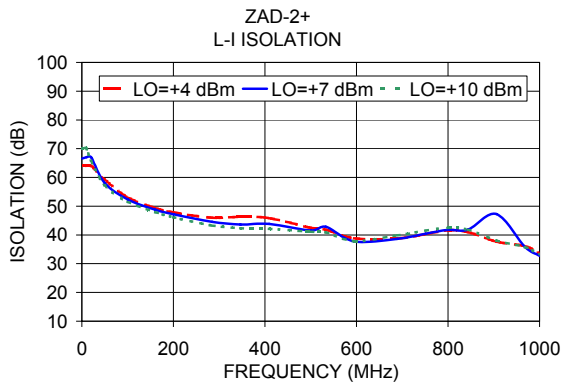
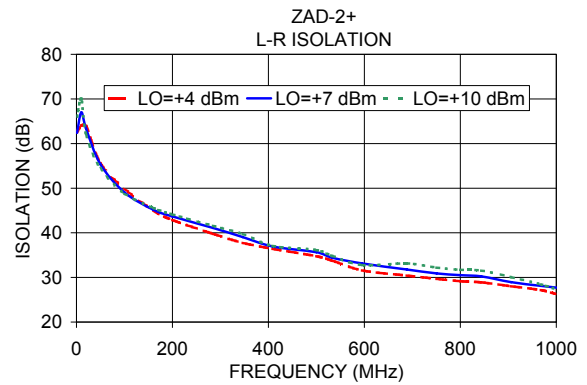
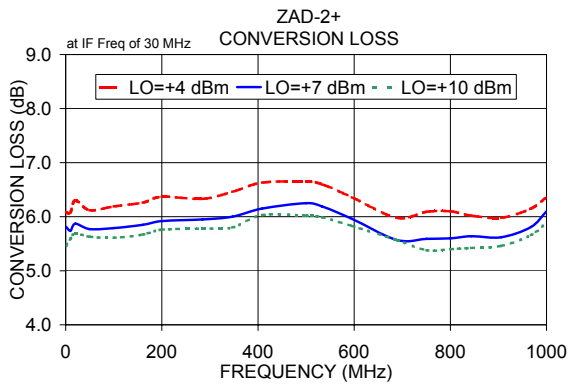
Electrical Schematic



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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