

# Coaxial Frequency Mixer

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

## ZAD-2+



Generic photo used for illustration purposes only

CASE STYLE: M22

Connectors	Model
BNC	ZAD-2+
<b>BRACKET (OPTION "B")</b>	
<b>BRACKET (OPTION "BR")</b>	

**+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

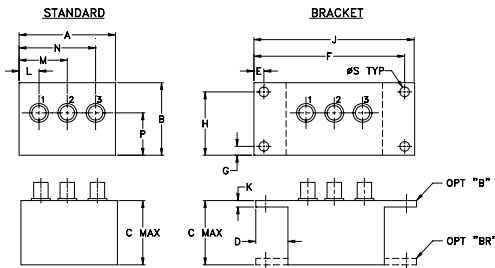
### Features

- 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	
$f_L - f_U$	$\bar{X}$	$\sigma$	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
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

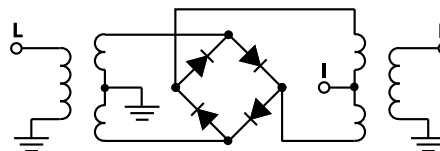
1 dB COMP.: +1 dBm typ.

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



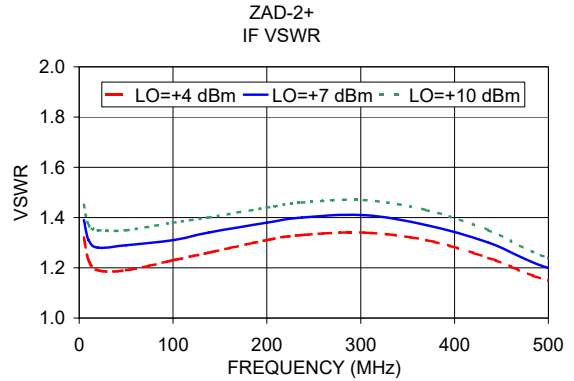
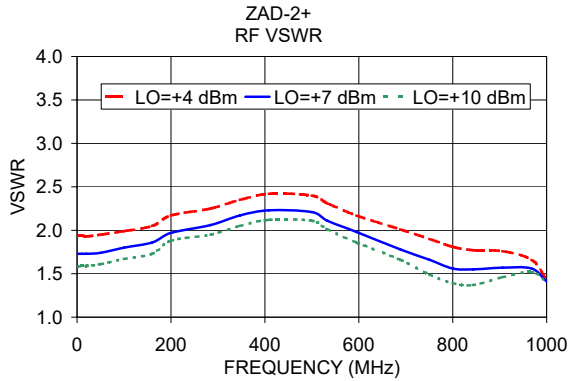
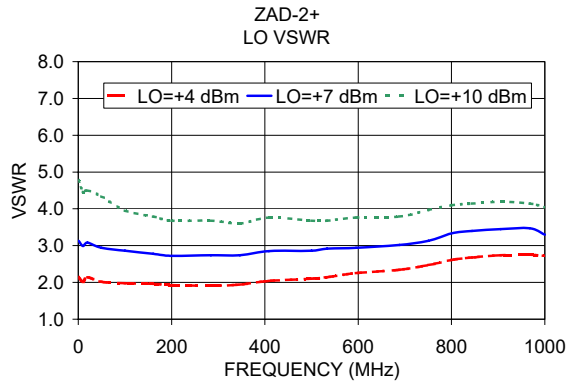
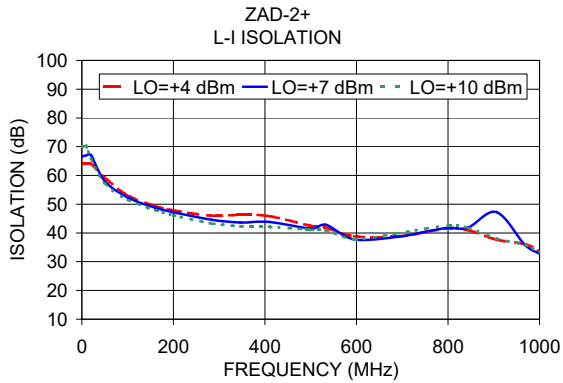
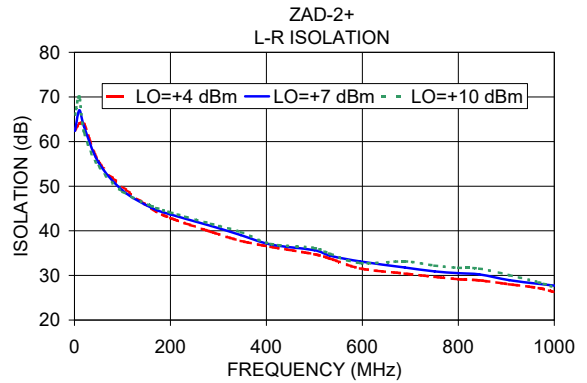
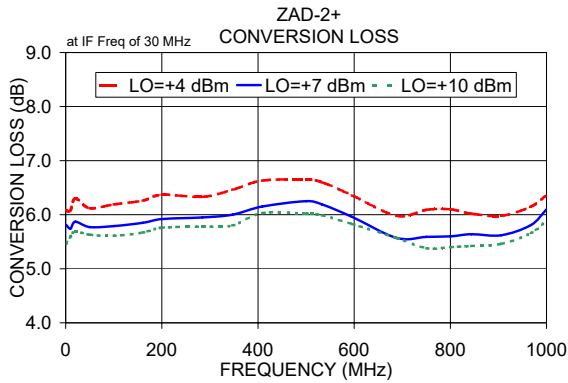
### Notes

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