

# Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 10 to 3000 MHz

## ZAD-11H+



CASE STYLE: M22

Connectors Model  
**BNC** ZAD-11H+  
**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	200mW
IF Current	40mA

Permanent damage may occur if any of these limits are exceeded.

### Coaxial Connections

LO	1
RF	3
IF	2

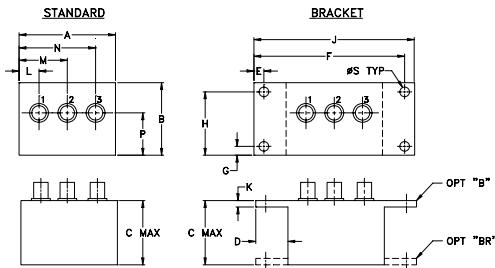
### Features

- low conversion loss, 6.83 dB typ.
- wideband, 10 to 3000 MHz
- rugged shielded case

### Applications

- PCS/DCS
- cellular
- satellite distribution
- GPS
- 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

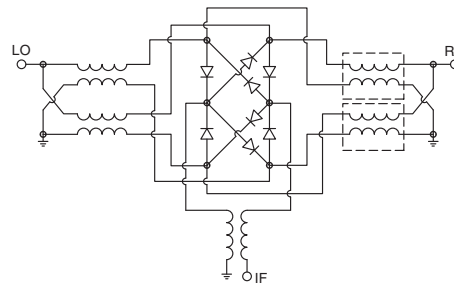
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total Range		L		M		U		L		M		U	
$f_l$ - $f_u$		$\bar{X}$	$\sigma$	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
10-3000	10-1000	6.83	0.09	10.0	12.0	27	20	25	18	23	16	27	20	25	18	23	16

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
10.00	40.00	6.43	32.26	35.01	1.13	2.07
20.00	50.00	6.58	33.52	36.23	1.07	2.19
103.44	73.44	6.60	32.25	33.97	1.08	2.01
200.00	170.00	6.78	30.89	32.03	1.13	1.96
290.31	260.31	6.75	29.76	30.61	1.18	1.91
500.00	470.00	6.94	28.74	29.28	1.29	1.83
570.63	540.69	6.81	28.80	29.04	1.34	1.81
757.50	727.50	7.00	28.06	28.08	1.48	1.81
944.38	913.91	7.05	28.00	26.87	1.66	1.80
1037.80	1007.40	7.37	28.67	26.49	1.72	1.74
1318.10	1288.00	6.81	27.69	26.66	1.92	1.69
1505.00	1474.90	6.68	27.57	27.97	1.99	1.65
1598.40	1568.30	6.65	27.30	28.78	1.75	1.91
1785.30	1755.00	6.71	27.75	28.96	1.89	1.91
1972.20	1942.10	6.57	29.51	31.44	1.76	1.75
2065.60	2035.10	6.76	28.94	33.79	1.68	1.66
2252.50	2222.10	6.61	30.22	36.80	1.68	1.49
2439.40	2408.60	6.63	31.19	37.00	1.69	1.14
2626.30	2596.00	6.95	30.21	30.13	1.49	1.26
3000.00	2969.30	8.58	32.46	26.88	1.90	2.47

### Electrical Schematic

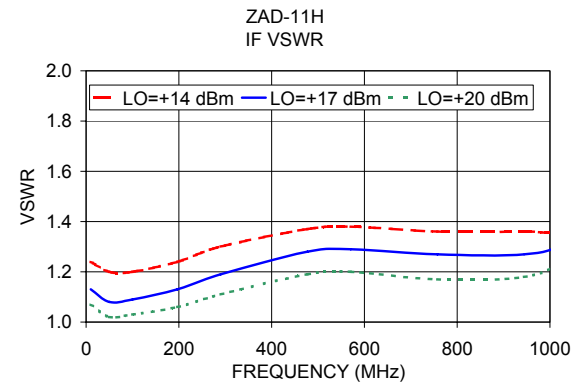
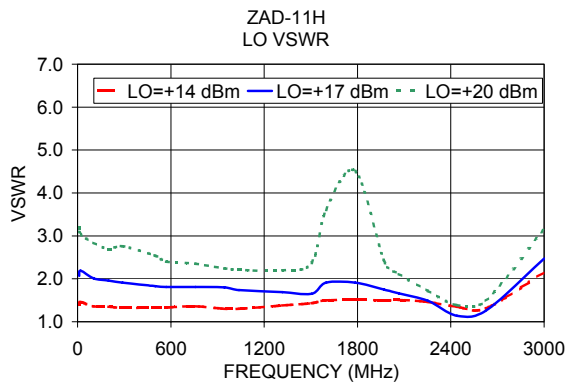
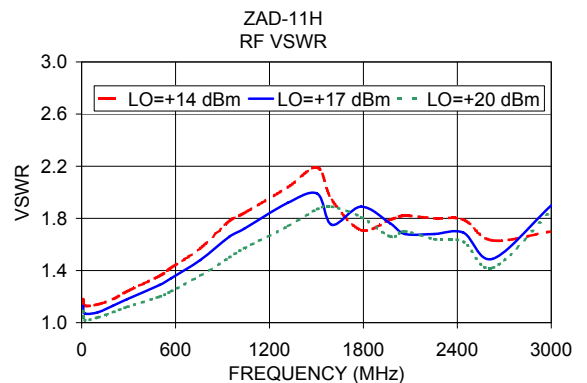
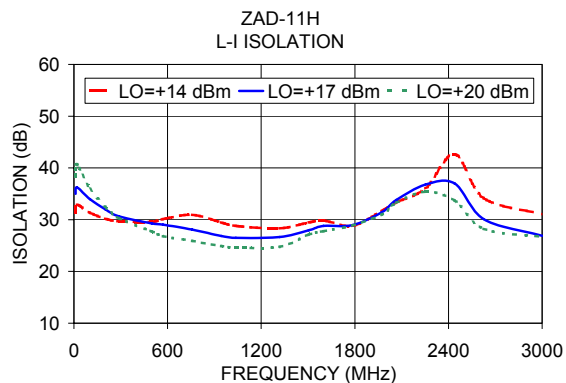
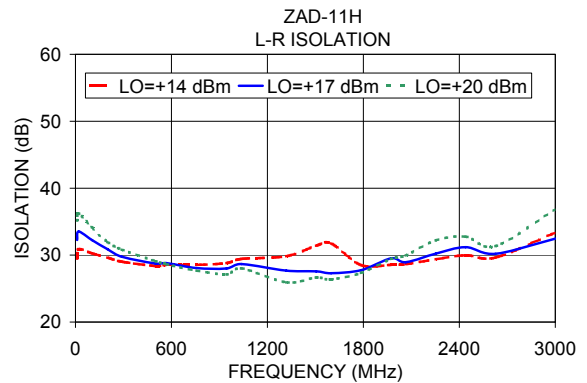
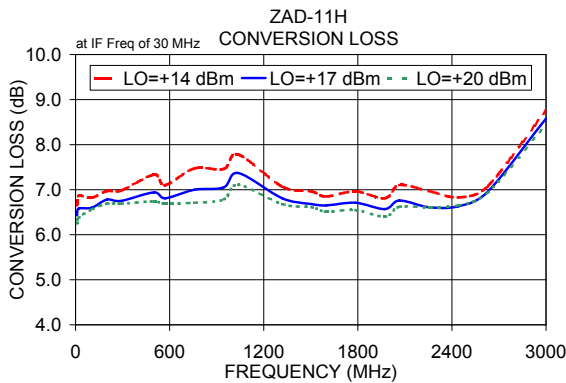


### Notes

- 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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