

# Coaxial Frequency Mixer

Level 23 (LO Power +23 dBm) 0.1 to 1000 MHz

## ZFY-2+ ZFY-2



Generic photo used for illustration purposes only

CASE STYLE: K18

Connectors	Model
BNC	ZFY-2
SMA	ZFY-2-S+
<b>BRACKET (OPTION "B")</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	350mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

### Coaxial Connections

LO	1
RF	2
IF	3

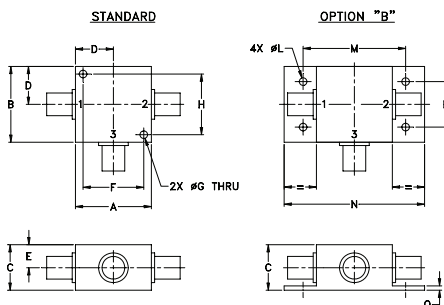
### Features

- low conversion loss, 5.40 dB typ.
- good L-R & L-I isolation, 40 dB typ.
- rugged shielded case

### Applications

- VHF/UHF
- instrumentation
- cellular

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	wt
1.25	1.25	.75	.63	.38	1.00	.125	1.000	--	--	.125	1.688	2.18	.75	.07	grams
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40	--	--	3.18	42.88	55.37	19.05	1.78	70.0

### Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)							
		L	M	U	L	M	U					
0.1-1000	5.40	40	40	30	30	25	37	23	40	25	25	15

1 dB COMP.: +20 dBm typ.

\*IF response from 0.1 to 0.01 MHz falls off 3 dB.

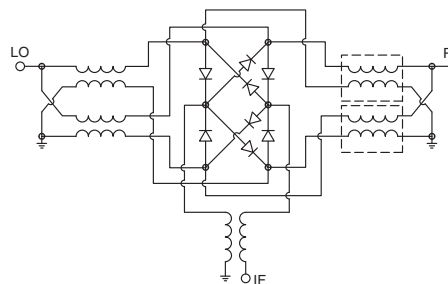
L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

m = mid band [ $2 f_L$  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)
0.10	30.10	6.00	24.85	1.20	1.25
0.50	30.50	6.04	36.68	1.21	1.28
5.00	35.00	5.85	41.65	1.22	1.21
20.00	50.00	5.23	62.70	1.21	1.25
50.00	80.00	5.27	68.47	1.22	1.30
100.00	70.00	5.41	69.04	1.26	1.22
142.94	112.94	5.59	65.49	1.30	1.23
214.37	184.37	5.62	63.14	1.35	1.19
250.08	220.08	5.85	62.33	1.43	1.14
321.50	291.50	5.73	60.72	1.60	1.11
392.92	362.92	5.85	56.12	1.83	1.31
464.34	434.34	6.34	47.61	2.10	1.51
535.77	505.77	6.82	41.48	2.21	1.70
571.48	541.48	6.64	40.17	2.26	1.73
642.90	612.90	7.21	38.48	2.49	2.06
714.32	684.32	6.76	36.93	2.62	2.20
785.74	755.74	6.76	36.93	2.73	1.95
857.16	827.16	6.90	35.86	2.72	1.37
928.59	898.59	7.11	36.31	2.59	1.19
1000.00	970.00	7.47	39.75	2.40	1.57

### Electrical Schematic



### Notes

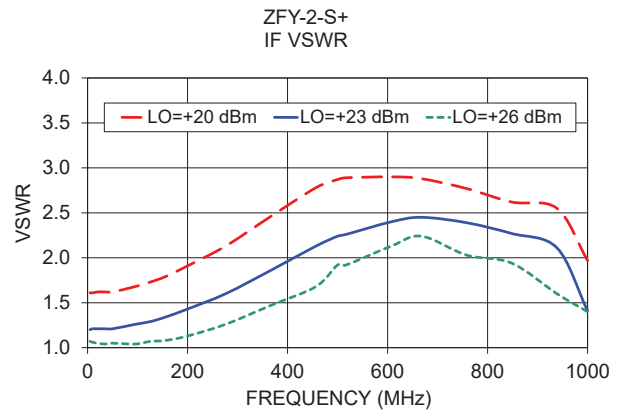
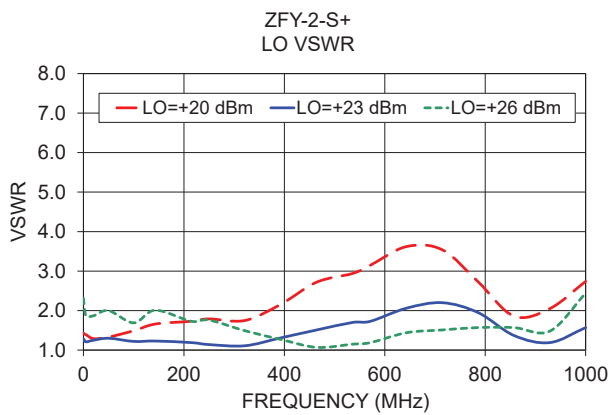
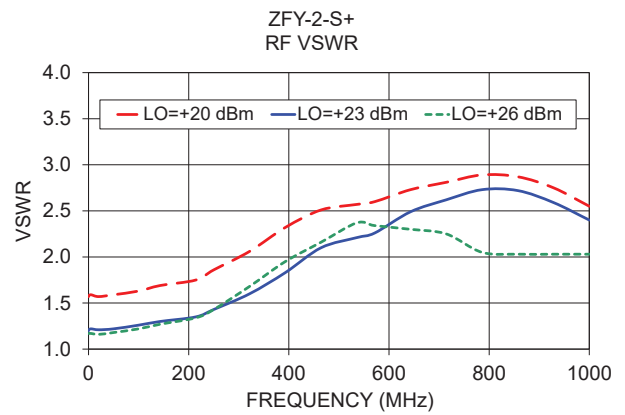
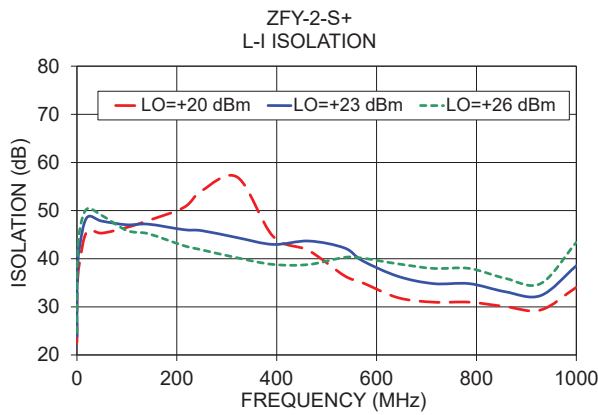
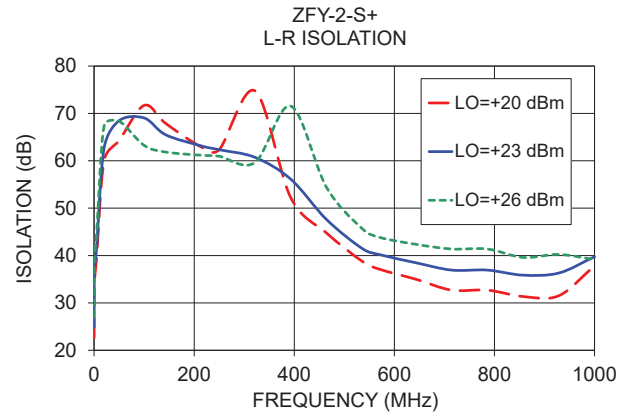
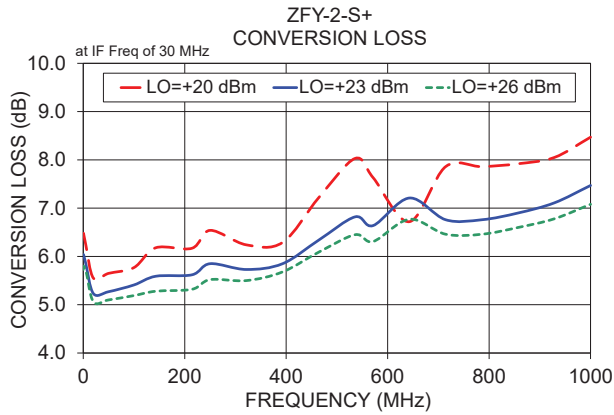
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. C  
M153690  
ZFY-2  
DJ/TD/CP  
200811

## Performance Charts



### Notes

- A. 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.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

