

Coaxial Frequency Mixer

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

ZFY-2+ ZFY-2



BNC version shown
CASE STYLE: K18

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

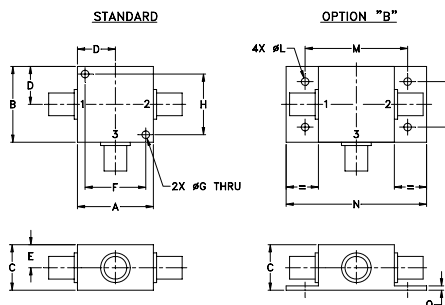
- VHF/UHF
- instrumentation
- cellular

Connectors	Model	Price	Qty.
BNC	ZFY-2	\$79.95	(1-9)
SMA	ZFY-2-S(+)	\$84.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.00	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.75	.07	grams
--	--	3.18	42.88	55.37	19.05	1.78	70.0

Electrical Specifications

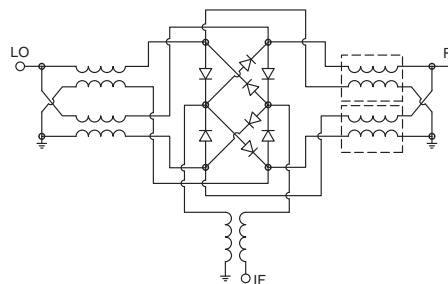
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)					
		L	M	U	L	M	U			
0.1-1000	5.40	40	40	30	37	23	40	25	25	15

1 dB COMP.: +20 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]
 *IF response from 0.1 to 0.01 MHz falls off 3 dB. 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)
0.10	6.00	24.85	23.85	1.20	1.25
0.50	6.04	36.68	35.77	1.21	1.28
5.00	5.85	41.65	42.30	1.22	1.21
20.00	5.68	44.97	46.33	1.21	1.25
50.00	5.70	45.99	47.10	1.22	1.30
100.00	5.65	45.52	45.79	1.26	1.22
142.94	5.66	44.24	44.02	1.30	1.23
214.37	5.79	40.93	39.85	1.35	1.19
250.08	5.86	39.52	38.88	1.43	1.14
321.50	5.81	37.74	35.22	1.60	1.11
392.92	5.91	38.90	33.06	1.83	1.31
464.34	6.50	42.47	34.07	2.10	1.51
535.77	7.03	40.44	35.52	2.21	1.70
571.48	7.34	39.42	34.94	2.26	1.73
642.90	7.88	36.98	31.33	2.49	2.06
714.32	8.27	34.35	29.91	2.62	2.20
785.74	8.37	32.57	29.06	2.73	1.95
857.16	8.53	30.10	26.12	2.72	1.37
928.59	9.10	27.93	23.81	2.59	1.19
1000.00	9.35	25.45	21.46	2.40	1.57

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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Performance Charts

