

Coaxial Frequency Mixer

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

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

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+)

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total		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.
0.1-1000	0.01-500*	5.40	0.24	7.5	9.5	40	20	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.

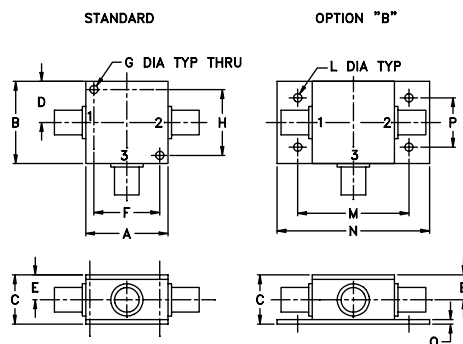
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

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)
RF	LO	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm
0.10	30.10	6.00	24.85	23.85	1.20	1.25
0.50	30.50	6.04	36.68	35.77	1.21	1.28
5.00	35.00	5.85	41.65	42.30	1.22	1.21
20.00	50.00	5.68	44.97	46.33	1.21	1.25
50.00	80.00	5.70	45.99	47.10	1.22	1.30
100.00	70.00	5.65	45.52	45.79	1.26	1.22
142.94	112.94	5.66	44.24	44.02	1.30	1.23
214.37	184.37	5.79	40.93	39.85	1.35	1.19
250.08	220.08	5.86	39.52	38.88	1.43	1.14
321.50	291.50	5.81	37.74	35.22	1.60	1.11
392.92	362.92	5.91	38.90	33.06	1.83	1.31
464.34	434.34	6.50	42.47	34.07	2.10	1.51
535.77	505.77	7.03	40.44	35.52	2.21	1.70
571.48	541.48	7.34	39.42	34.94	2.26	1.73
642.90	612.90	7.88	36.98	31.33	2.49	2.06
714.32	684.32	8.27	34.35	29.91	2.62	2.20
785.74	755.74	8.37	32.57	29.06	2.73	1.95
857.16	827.16	8.53	30.10	26.12	2.72	1.37
928.59	898.59	9.10	27.93	23.81	2.59	1.19
1000.00	970.00	9.35	25.45	21.46	2.40	1.57

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 Schematic

