

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 2 to 500 MHz

ZFM-1H+
ZFM-1H



SMA version shown

CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFM-1H(+)	\$64.95 ea.	(1-9)
SMA	ZFM-1H-S(+)	\$69.95 ea.	(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.

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

Coaxial Connections

LO	1
RF	3
IF	2

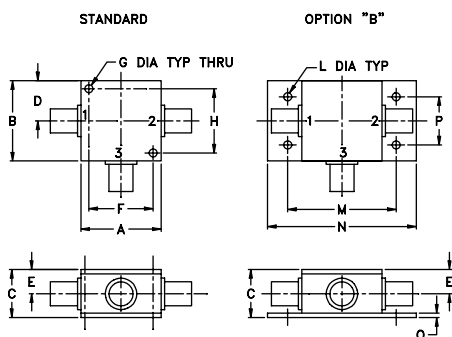
Features

- low conversion loss, 6.14 dB typ.
- good L-R isolation, 40 dB typ, L-I, 35 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- defense & federal communications
- FM radio
- instrumentation

Outline Drawing



Outline Dimensions (inch)

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)					
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.
2-500	DC-500	6.14	0.11	7.5	8.5	50	45	40	30	30	25	45	35	35	25	25	20

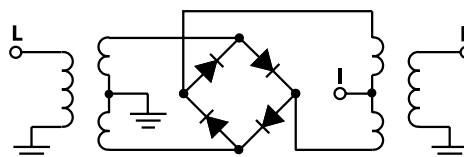
1 dB COMP.: +14 dBm typ.

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
2.00	32.00	6.30	62.98	52.28	1.22	1.67
5.00	35.00	5.95	62.06	52.79	1.10	1.60
10.00	40.00	5.92	60.47	52.35	1.03	1.63
20.00	50.00	5.91	57.14	51.13	1.02	1.61
34.13	64.13	5.81	53.27	49.30	1.04	1.58
50.00	80.00	5.72	50.24	47.27	1.06	1.57
66.26	96.26	5.66	48.03	45.61	1.07	1.55
82.33	112.33	5.71	46.33	44.27	1.08	1.54
100.00	130.00	5.63	44.99	43.26	1.09	1.57
130.52	160.52	5.61	43.18	41.91	1.10	1.55
162.65	192.65	5.61	41.46	40.45	1.10	1.55
200.00	240.00	5.60	40.12	39.22	1.08	1.60
259.04	318.04	5.42	38.10	37.51	1.07	1.67
307.24	388.24	5.62	37.54	36.13	1.06	1.70
355.43	447.43	5.86	37.41	36.94	1.05	1.76
387.56	487.56	5.92	36.35	35.99	1.04	1.82
435.76	545.76	5.81	35.35	33.91	1.05	1.84
467.89	587.89	5.90	36.34	33.81	1.06	1.85
483.95	603.95	6.08	36.44	33.54	1.08	1.87
500.00	625.00	6.27	36.27	33.21	1.09	1.90

Electrical Schematic



Performance Charts

ZFM-1H+ ZFM-1H

