

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 5 to 1250 MHz

ZFM-4+



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Coaxial Connections

LO	1
RF	2
IF	3

Features

- low conversion loss, 5.70 dB typ.
- high L-R isolation, 40 dB typ, L-I, 35 dB typ.
- phase detection, positive polarity
- rugged shielded case

Applications

- VHF/UHF
- cellular
- instrumentation
- federal & defense communications

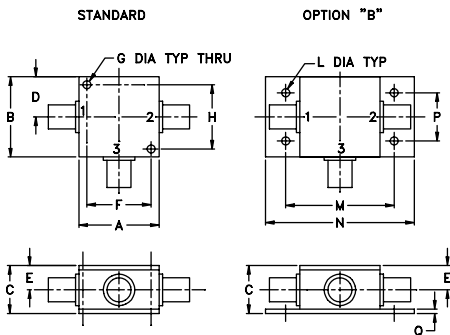
SMA version shown
CASE STYLE: K18

Connectors	Model	Price	Qty.
BNC	ZFM-4+	\$61.95 ea.	(1-9)
SMA	ZFM-4-S+	\$66.95 ea.	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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)												
		L	M	U	L	M	U										
5-1250	DC-1250	5.70	0.34	7.5	8.5	50	45	40	30	30	25	45	40	35	25	25	20

1 dB COMP.: +1 dBm typ.

For phase detection: DC output has positive with in-phase LO and RF signals

L = low range [f_L to $10 f_L$]

m = mid band [$2f_L$ to $f_U/2$]

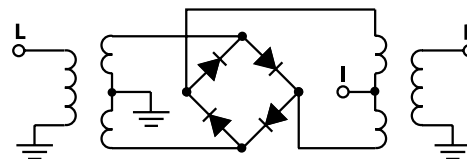
M = mid range [$10 f_U$ to $f_U/2$]

U = upper range [$f_U/2$ to f_U]

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
5.00	35.00	7.08	67.00	1.54	3.00
20.00	50.00	6.84	67.00	1.42	2.83
50.00	80.00	6.64	50.64	1.34	2.85
100.00	70.00	6.48	44.54	1.31	2.72
138.39	108.39	6.51	38.97	1.26	2.49
227.32	197.32	6.59	37.28	1.25	2.44
271.78	241.78	6.44	34.49	1.20	2.33
360.71	330.71	6.47	32.40	1.17	2.23
449.64	419.64	6.57	31.70	1.13	2.19
538.57	508.57	6.45	31.48	1.12	2.17
583.03	553.03	6.54	30.37	1.12	2.14
671.96	641.96	6.82	29.62	1.13	2.05
760.89	730.89	6.83	29.45	1.16	2.02
849.82	819.82	6.86	29.60	1.18	2.05
894.28	864.28	7.01	30.37	1.22	2.12
983.21	953.21	7.24	29.78	1.24	2.11
1027.70	997.70	7.43	29.36	1.31	2.17
1116.60	1086.60	7.58	28.75	1.43	2.24
1200.00	1170.00	7.70	28.39	1.52	2.32
1250.00	1220.00	7.80	28.05	1.62	2.36

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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