

# Coaxial Frequency Mixer

Level 10 (LO Power +10 dBm) 10 to 3000 MHz

## ZFM-15+ ZFM-15



SMA version shown

CASE STYLE: K18

Connectors	Model
BNC	ZFM-15 (+)
SMA	ZFM-15-S (+)

+ 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	50mW
IF Current	40mA

### Coaxial Connections

LO	1
RF	2
IF	3

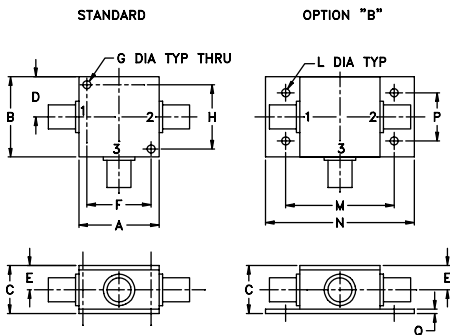
### Features

- low conversion loss, 6.13 dB typ.
- good L-R isolation, 35 dB typ, L-I, 30 dB typ.
- wideband, 10 to 3000 MHz
- rugged shielded case

### Applications

- cellular
- GPS
- MMDS
- ISM
- 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)		
		L	M	U	L	M	U
10-3000	6.13	35	35	35	30	30	30

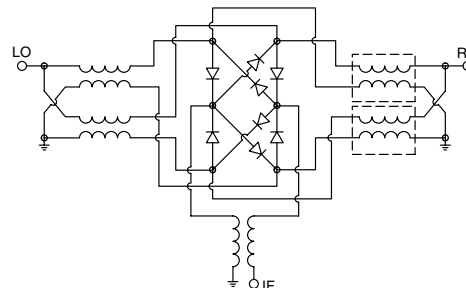
1 dB COMP.: +5 dBm typ.

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  $f_U$ ]  
 $\bar{X}$  = Mid-Band m Total Range Max.

### Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
10.00	40.00	6.53	26.10	25.08	1.84
20.00	50.00	6.60	30.38	29.74	1.54
100.00	70.00	6.55	35.82	35.93	1.50
200.00	170.00	6.60	37.35	38.21	1.55
400.00	370.00	6.74	36.49	39.50	1.72
500.00	470.00	6.52	35.42	38.00	1.99
790.00	760.00	6.70	32.94	33.60	2.45
920.00	890.00	6.76	32.80	33.97	2.70
1180.00	1150.00	7.30	31.62	32.89	2.85
1310.00	1280.00	7.30	31.27	34.31	2.75
1500.00	1470.00	6.54	29.76	32.85	2.28
1700.00	1670.00	6.91	28.49	30.87	1.94
1830.00	1800.00	6.97	29.46	28.22	1.44
2000.00	1970.00	7.07	28.32	27.77	1.25
2200.00	2170.00	6.97	27.89	27.68	1.42
2480.00	2450.00	6.93	28.37	24.64	1.97
2610.00	2580.00	7.08	27.10	23.13	2.18
2740.00	2710.00	7.45	26.79	21.95	2.37
2870.00	2840.00	7.56	26.23	21.25	2.09
3000.00	2970.00	8.31	29.30	20.32	2.18

### Electrical Schematic



# Performance Charts

# ZFM-15+ ZFM-15

