

# Coaxial Frequency Mixer

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

## ZFM-15+ ZFM-15



SMA version shown  
CASE STYLE: K18

### 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

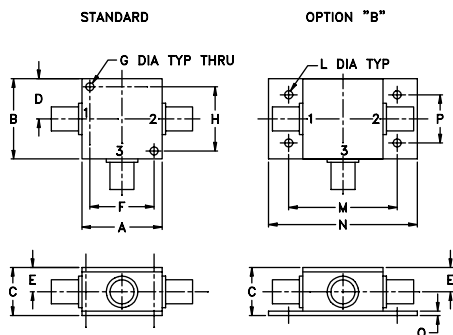
- cellular
- GPS
- MMDS
- ISM
- instrumentation

Connectors	Model	Price	Qty.
BNC	ZFM-15 (+)	\$89.95 ea.	(1-9)
SMA	ZFM-15-S (+)	\$94.95 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.

### 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

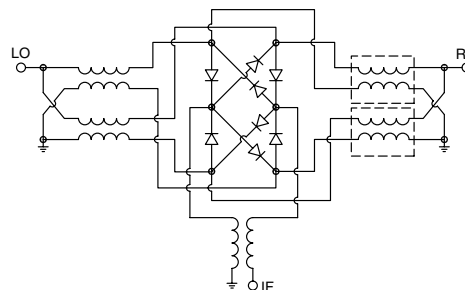
1 dB COMP.: +5 dBm typ.

L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $f_L$  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)
10.00	40.00	6.53	26.10	1.84	1.71
20.00	50.00	6.60	30.38	1.54	1.51
100.00	70.00	6.55	35.82	1.50	1.37
200.00	170.00	6.60	37.35	1.55	1.44
400.00	370.00	6.74	36.49	1.72	1.40
500.00	470.00	6.52	35.42	1.99	1.34
790.00	760.00	6.70	32.94	2.45	1.33
920.00	890.00	6.76	32.80	2.70	1.36
1180.00	1150.00	7.30	31.62	2.85	1.36
1310.00	1280.00	7.30	31.27	2.75	1.38
1500.00	1470.00	6.54	29.76	2.28	1.30
1700.00	1670.00	6.91	28.49	1.94	1.27
1830.00	1800.00	6.97	29.46	1.44	1.29
2000.00	1970.00	7.07	28.32	1.25	1.34
2200.00	2170.00	6.97	27.89	1.42	1.34
2480.00	2450.00	6.93	28.37	1.97	1.44
2610.00	2580.00	7.08	27.10	2.18	1.52
2740.00	2710.00	7.45	26.79	2.37	1.93
2870.00	2840.00	7.56	26.23	2.09	2.25
3000.00	2970.00	8.31	29.30	2.18	2.63

### Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

REV. A  
M98898  
ZFM-15+  
DJ/TD/CP  
061211  
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# Performance Charts

# ZFM-15+ ZFM-15

