

# Coaxial Frequency Mixer

Level 23 (LO Power +23 dBm) 10 to 2400 MHz

## ZFY-11



BNC version shown  
CASE STYLE: K18

Connectors	Model
BNC	ZFY-11
SMA	ZFY-11-S
BRACKET (OPTION "B")	

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	350mW
IF Current	40mA

Permanent damage may occur if any of these limits are exceeded.

### Coaxial Connections

LO	1
RF	2
IF	3

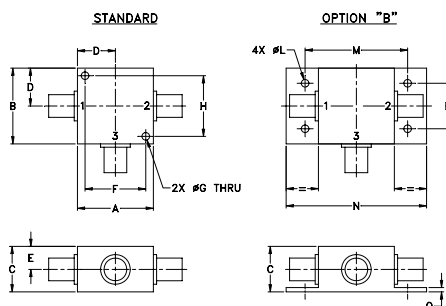
### Features

- low conversion loss, 7.40 dB typ.
- wideband, 10 to 2400 MHz
- rugged shielded case

### Applications

- UHF/VHF
- cellular
- satellite distribution
- GPS
- PCS/DCS

### 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 Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total Range Max.	10	L		M		U		L		M		U	
$f_L$ - $f_U$	$\bar{X}$	$\sigma$	Max.			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
10-2400	5-1000	7.40	0.09	8.5	10	28	20	25	20	25	20	28	20	26	20	25	20

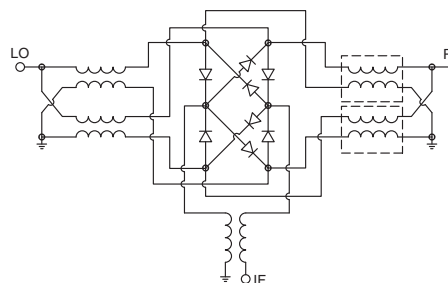
1 dB COMP.: +20 dBm typ.

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 +23dBm	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm
10.00	40.00	7.46	41.65	30.72	1.55	1.24
20.00	50.00	7.51	43.95	31.06	1.54	1.22
50.00	80.00	7.74	44.45	30.74	1.51	1.31
87.10	57.10	7.81	44.86	29.91	1.50	1.26
100.00	70.00	7.66	44.68	29.62	1.49	1.25
200.00	170.00	7.59	46.21	28.67	1.47	1.22
318.39	288.39	8.03	41.22	28.91	1.45	1.23
500.00	470.00	7.47	37.07	29.62	1.43	1.28
626.77	596.77	7.57	33.53	30.05	1.38	1.34
780.97	750.97	7.27	33.54	31.66	1.34	1.29
1000.00	970.00	7.77	33.08	33.53	1.38	1.23
1089.36	1059.36	7.84	33.62	34.45	1.49	1.33
1243.54	1213.54	8.04	34.16	36.92	1.59	1.35
1397.74	1367.74	8.31	33.51	37.46	1.82	1.48
1500.00	1470.00	8.18	34.49	39.38	1.99	1.58
1706.13	1676.13	8.31	34.41	45.70	2.18	1.69
2000.00	1970.00	8.17	37.07	38.82	2.32	1.71
2091.61	2061.61	8.07	37.89	36.35	2.32	1.68
2245.81	2215.81	7.59	37.54	34.57	2.28	1.74
2400.00	2370.00	7.11	35.91	33.44	2.15	1.77

### Electrical Schematic



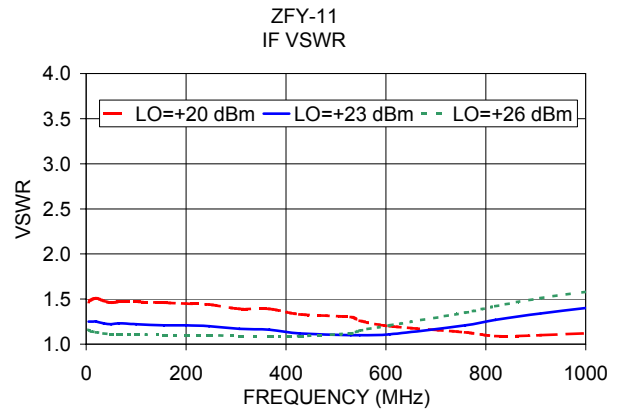
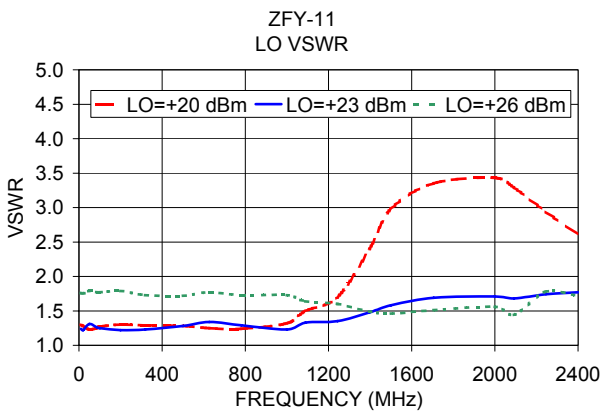
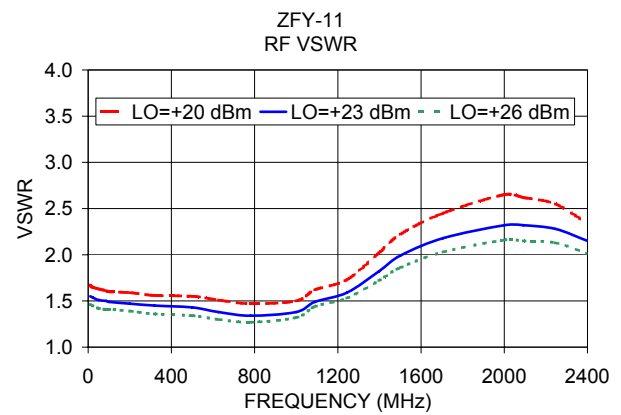
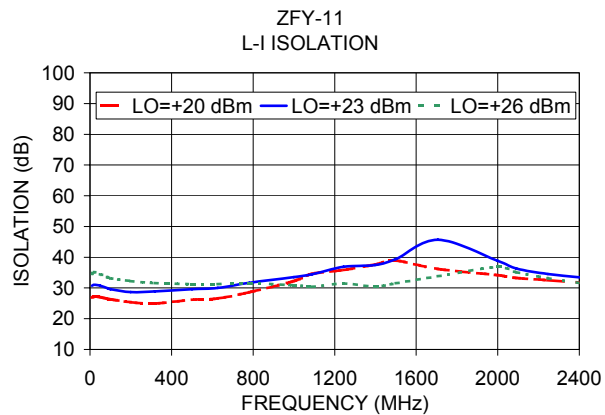
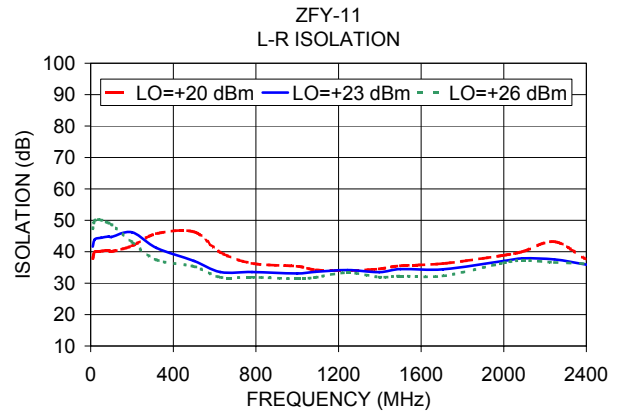
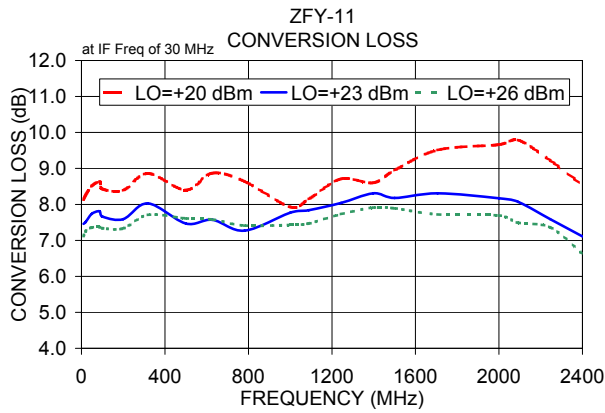
### Notes

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