

# Coaxial Frequency Mixer

Level 23 (LO Power +23 dBm) 0.07 to 200 MHz

## ZMY-3



### 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	3
IF	2

### Features

- low conversion loss, 5.53 dB typ.
- high L-R & L-I isolation, 40 typ.
- rugged shielded case

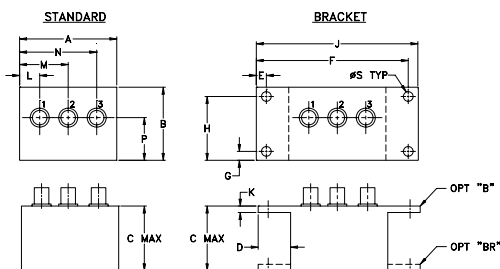
### Applications

- VHF
- instrumentation
- FM radio

CASE STYLE: M21

Connectors	Model
SMA	ZMY-3
<b>BRACKET (OPTION "B")</b>	
<b>BRACKET (OPTION "BR")</b>	

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07
J	K	L	M	N	P	S	wt
2.50	.10	.31	.75	1.19	.66	.150	grams
63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0

### Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF $f_c-f_u$	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U	
		$\bar{X}$	$\sigma$	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.07-200	DC-200	5.53	0.08	7.5	8.0	55	45	40	30	30	25	55	45	40	30	30	20

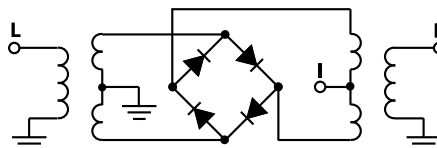
1 dB COMP.: +15 dBm typ.

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 [ $2 f_l$  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
0.07	30.07	5.77	55.55	56.68	1.17	2.42
0.20	30.20	5.58	53.15	57.09	1.18	2.40
1.00	31.00	5.29	52.74	57.07	1.18	2.23
5.00	35.00	5.23	52.57	56.88	1.17	2.21
20.00	50.00	5.27	52.28	56.59	1.17	2.19
34.54	64.54	5.24	51.27	54.69	1.16	2.20
48.33	78.33	5.26	48.91	51.06	1.15	2.20
62.12	92.12	5.28	46.28	47.85	1.15	2.27
69.01	99.01	5.29	44.38	45.65	1.14	2.27
82.80	52.80	5.28	42.67	43.88	1.13	2.28
96.59	66.59	5.28	41.29	41.90	1.13	2.25
103.48	73.48	5.25	39.95	40.89	1.13	2.14
117.27	87.27	5.28	39.22	39.90	1.12	2.10
131.06	101.06	5.29	39.37	39.78	1.12	2.17
144.85	114.85	5.34	38.04	37.10	1.12	2.25
158.63	128.63	5.43	36.70	33.79	1.12	2.29
165.53	135.53	5.47	36.49	31.41	1.13	2.22
179.32	149.32	5.47	36.22	30.50	1.14	2.16
193.10	163.10	5.54	36.47	29.43	1.16	2.18
200.00	170.00	5.51	36.43	29.00	1.16	2.21

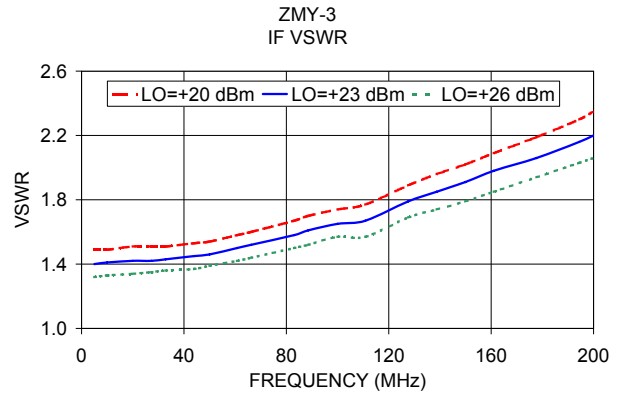
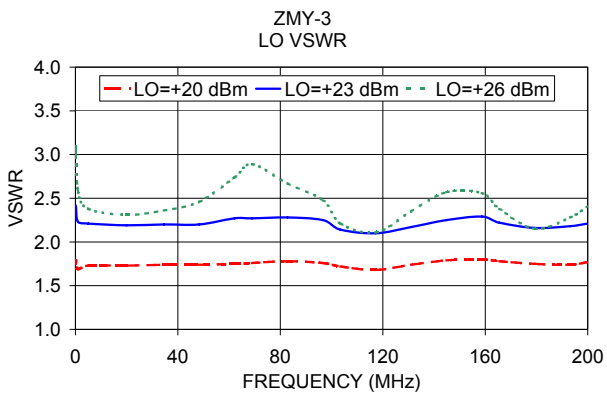
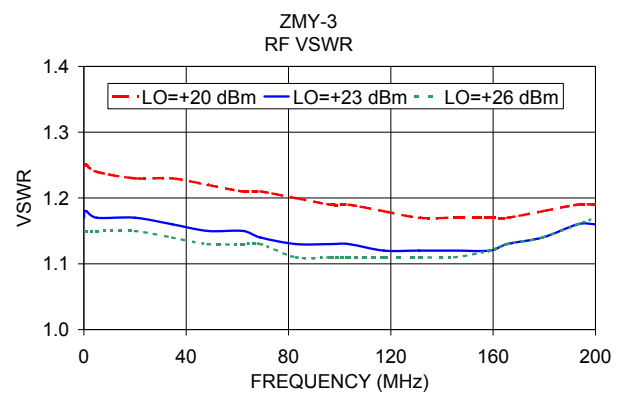
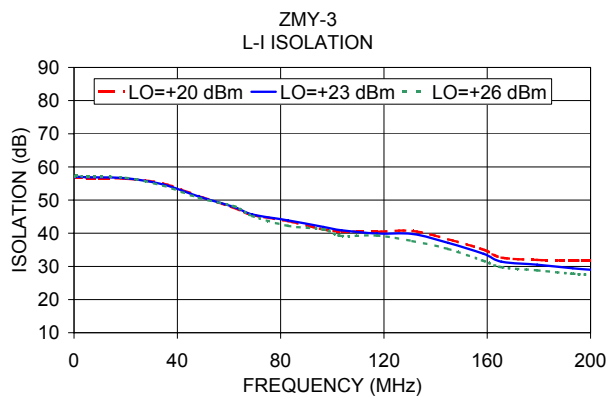
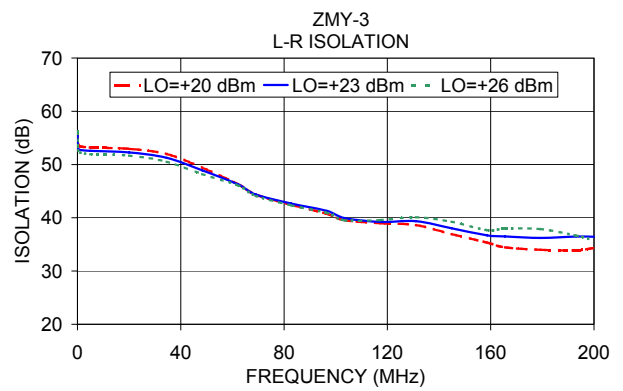
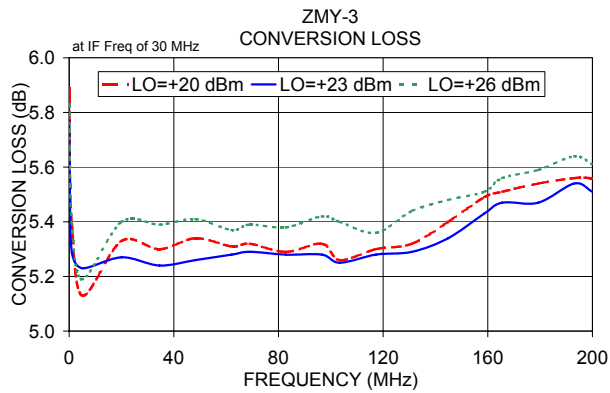
### Electrical Schematic



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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