

Coaxial Frequency Mixer

ZMY-1+

Level 23 (LO Power +23 dBm) 5 to 500 MHz



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, 6.62 dB typ.
- high isolation, 40 dB typ. L-R & L-I
- wideband, 5 to 500 MHz

Applications

- VHF/UHF
- instrumentation

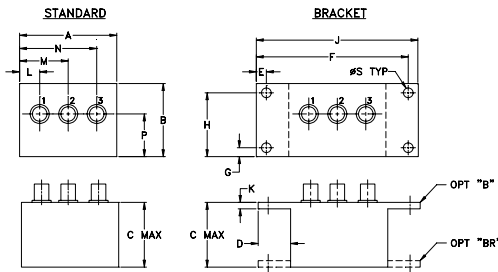
CASE STYLE: M21

Connectors	Model
SMA	ZMY-1+
BRACKET (OPTION "B")	
BRACKET (OPTION "BR")	

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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	IF	Mid-Band		Total Range	Max.	L		M		U		L		M		U	
f_L - f_U		\bar{X}	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
5-500	DC-500	6.62	0.10	7.5	8.5	55	45	40	30	30	25	55	45	40	30	30	20

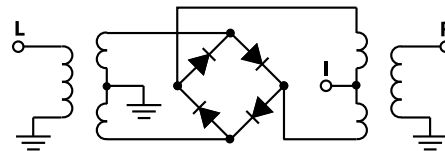
1 dB COMP.: +15 dBm typ.

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 [$2f_L$ 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
5.00	35.00	6.52	57.02	82.02	1.29	2.50
10.00	40.00	6.40	56.72	82.32	1.14	2.37
20.00	50.00	6.40	54.48	81.28	1.06	2.33
35.94	65.94	6.43	51.51	75.99	1.05	2.31
50.00	80.00	6.40	48.82	72.57	1.07	2.37
82.35	52.35	6.39	45.62	62.91	1.08	2.20
100.00	70.00	6.36	44.05	58.66	1.10	2.25
144.22	114.22	6.53	41.60	53.71	1.12	2.11
175.16	145.16	6.68	40.04	51.38	1.14	2.25
200.00	170.00	6.69	39.45	50.73	1.16	2.06
221.57	191.57	6.52	36.41	46.45	1.18	2.17
252.50	222.50	6.52	36.33	47.23	1.20	2.04
283.44	253.44	6.64	36.36	47.98	1.22	2.10
314.38	284.38	6.74	36.35	46.73	1.24	1.96
345.32	315.32	6.62	33.85	44.99	1.26	2.04
376.26	346.26	6.50	30.50	41.75	1.29	1.96
407.19	377.19	6.43	32.89	42.28	1.31	1.95
438.13	408.13	6.50	33.81	42.66	1.35	1.90
469.07	439.07	6.81	33.63	41.41	1.38	1.87
500.00	470.00	6.62	34.24	40.42	1.44	1.83

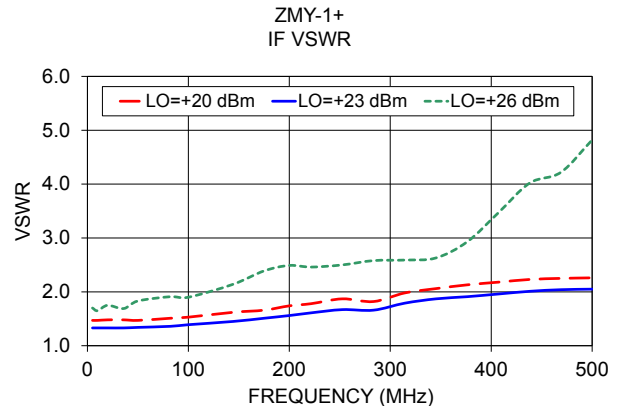
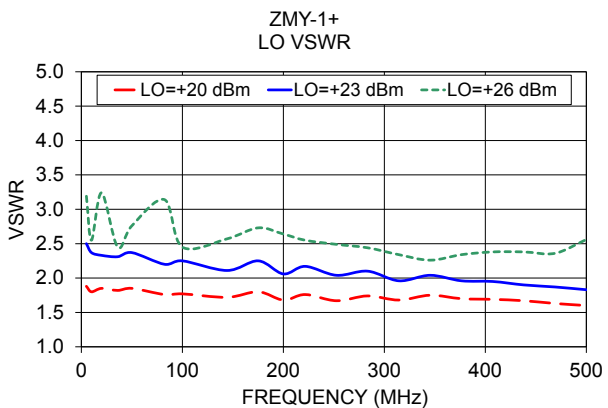
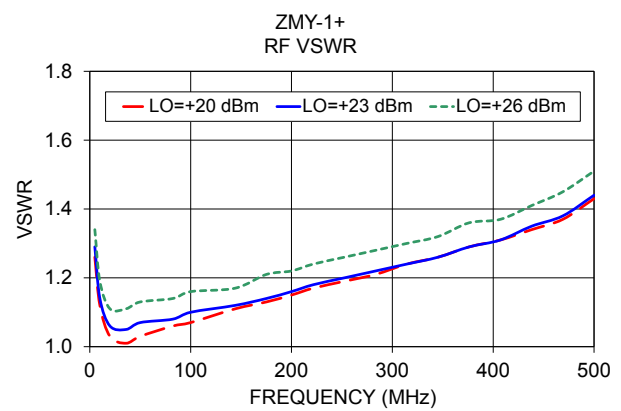
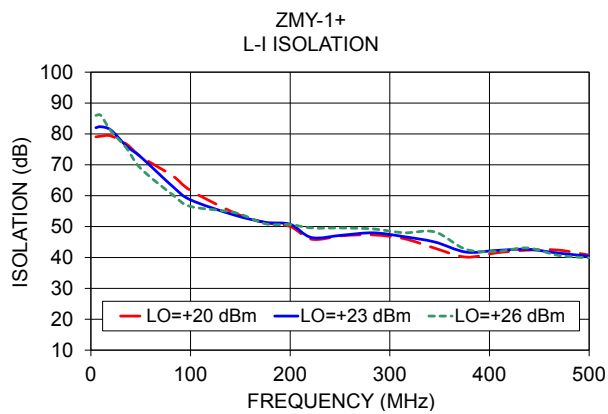
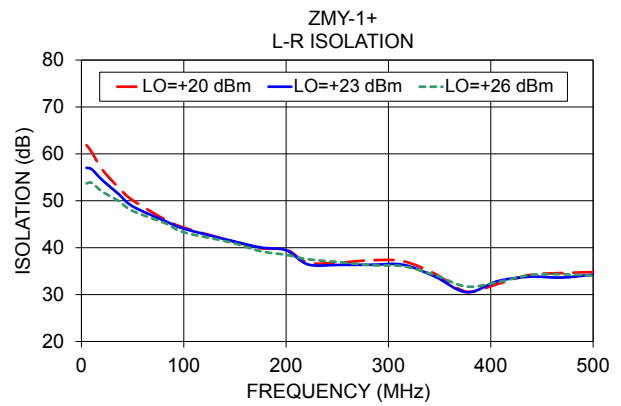
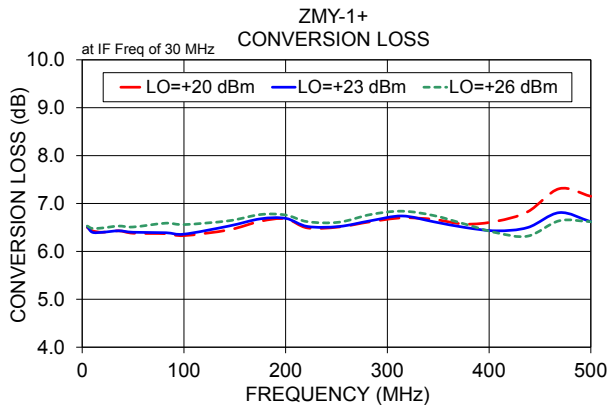
Electrical Schematic



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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