

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

Maximum Ratings

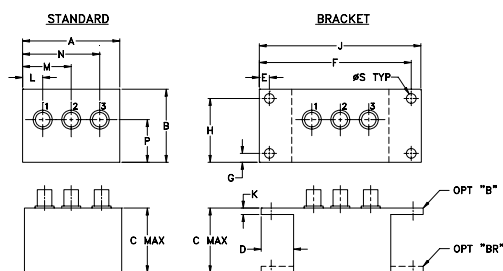
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	350mW
IF Current	40mA

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

Coaxial Connections

LO	1
RF	3
IF	2

Outline Drawing



Outline Dimensions (inch)

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

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
BRACKET (OPTION "B")	
BRACKET (OPTION "BR")	

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m				L			M			U			L		
		$\bar{X}$	σ	Max.	Total Range Max.	Typ.	Min.	Typ.	Typ.	Min.	Typ.	Typ.	Min.	Typ.	Typ.	Min.	Typ.
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

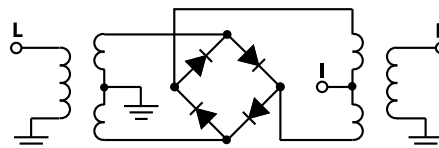
1 dB COMP.: +15 dBm typ.

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

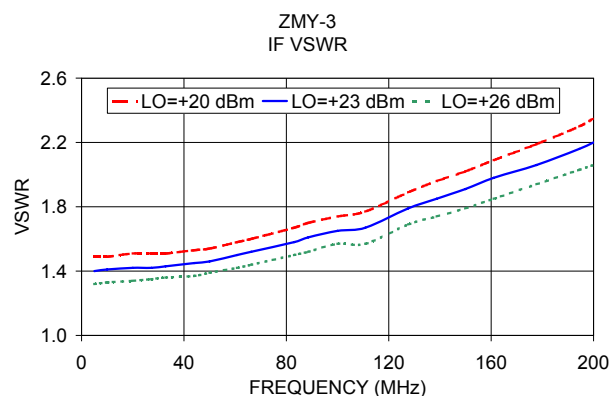
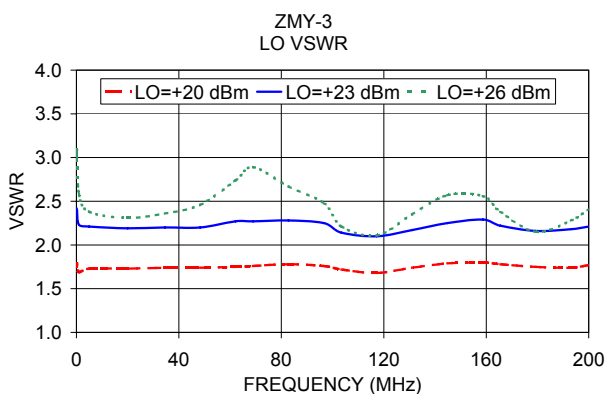
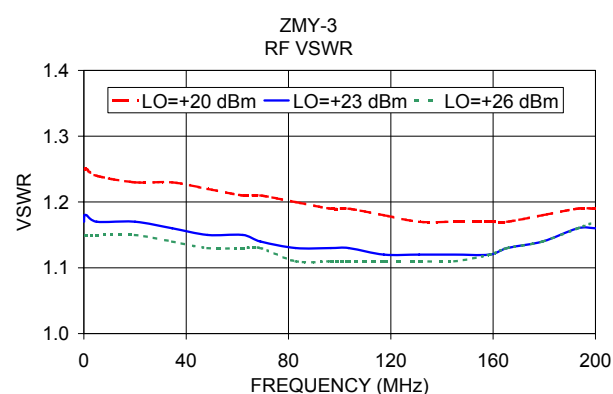
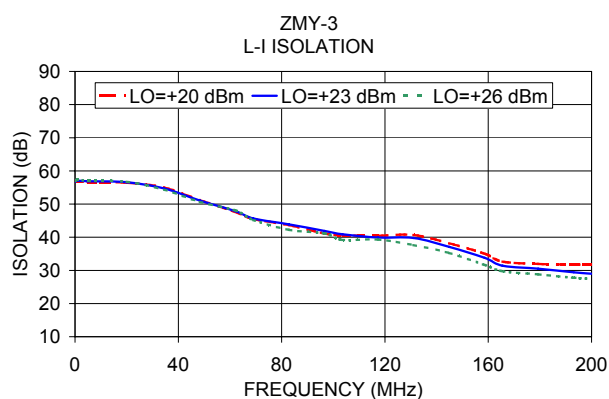
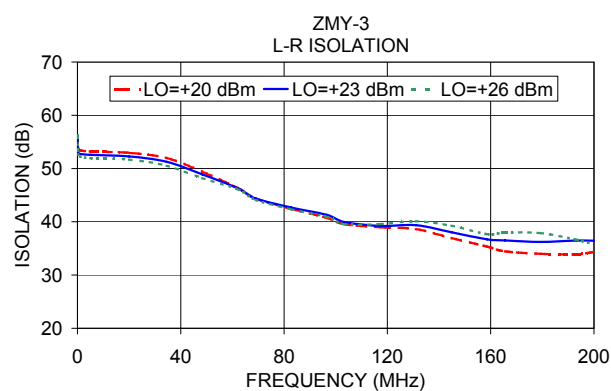
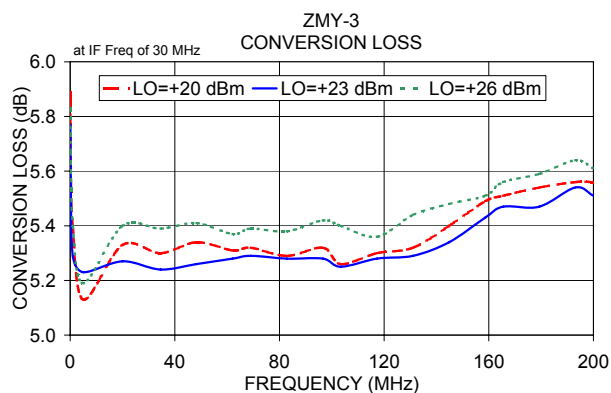
Electrical Schematic



Notes

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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