

Coaxial Frequency Mixer

Level 13 (LO Power +13 dBm) 20 to 1500 MHz

ZP-5MH+
ZP-5MH



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

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

Coaxial Connections

LO	L
RF	R
IF	X

Features

- low conversion loss, 7.0 dB typ.
- excellent L-R isolation, 41 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- satellite distribution
- instrumentation

BNC version shown
CASE STYLE: GG60

Connectors	Model	Price	Qty.
BNC	ZP-5MH(+)	\$47.95 ea.	(1-9)
SMA	ZP-5MH-S+	\$52.95 ea.	(1-9)

+ 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.

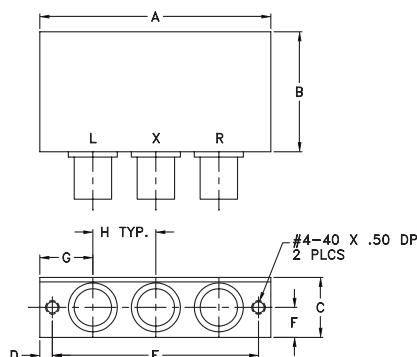
Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U	
		$\bar{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
20-1500	DC-1000	7.0	0.25	8.5	9.0	50	40	41	30	35	25	38	25	28	18	20	8

1 dB COMP.: +9 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 $f_U/2$]

Outline Drawing



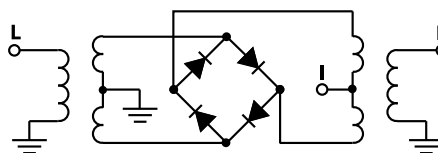
Outline Dimensions (inch)

A	B	C	D	E	F	G	H	wt
2.31	1.20	.60	.125	2.062	.30	.53	.63	grams
58.67	30.48	15.24	3.18	52.37	7.62	13.46	16.00	75.0

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
20.00	50.00	5.87	65.81	50.21	1.57	2.60
50.00	80.00	5.57	58.31	42.94	1.38	2.52
100.00	70.00	5.41	52.44	37.15	1.37	2.40
158.75	128.75	5.37	48.96	34.29	1.48	2.28
200.00	170.00	5.43	47.29	32.96	1.56	2.37
297.50	267.50	5.51	45.30	30.09	1.77	2.30
436.25	406.25	5.79	45.57	27.35	2.15	2.34
500.00	470.00	5.90	45.56	26.32	2.23	2.33
575.00	545.00	6.21	44.68	25.44	2.70	2.39
713.75	683.75	6.95	43.61	24.34	3.13	2.40
750.00	720.00	7.16	43.15	24.17	3.17	2.43
760.00	730.00	7.15	43.01	24.16	3.31	2.44
852.50	822.50	7.16	41.36	23.95	3.52	2.50
991.25	961.25	7.16	39.32	22.75	3.65	2.58
1000.00	970.00	7.32	39.30	22.64	3.71	2.59
1130.00	1100.00	7.38	36.80	20.71	3.70	2.62
1222.50	1192.50	7.32	38.30	18.60	3.63	2.70
1361.25	1331.25	7.13	37.67	15.58	3.42	2.64
1453.75	1423.75	7.10	37.62	13.78	3.33	2.62
1500.00	1470.00	7.00	37.26	12.95	3.23	2.57

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

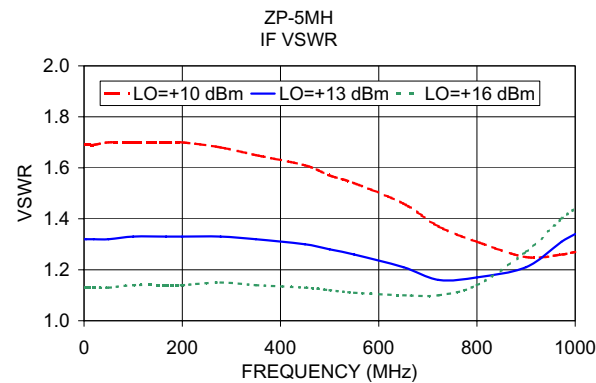
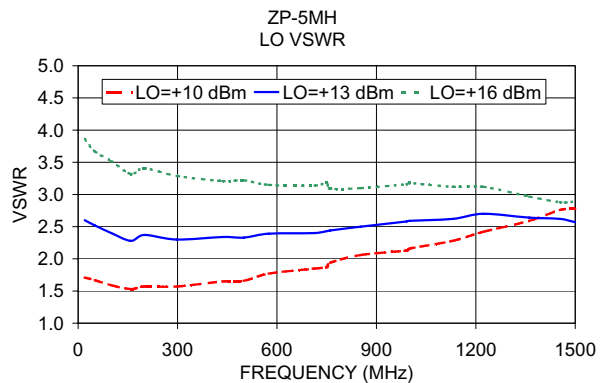
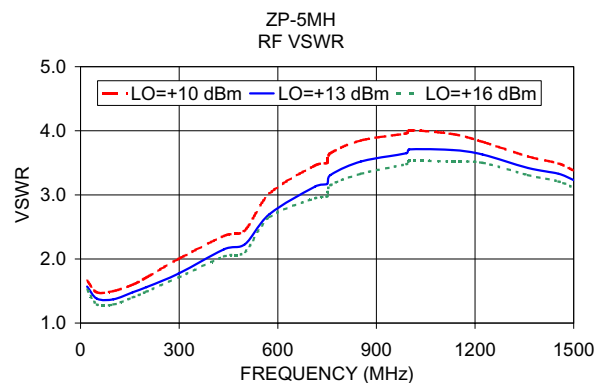
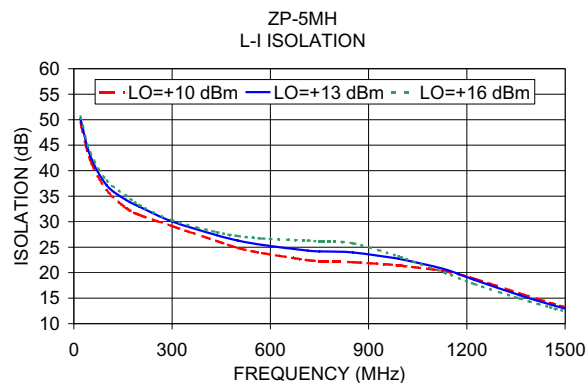
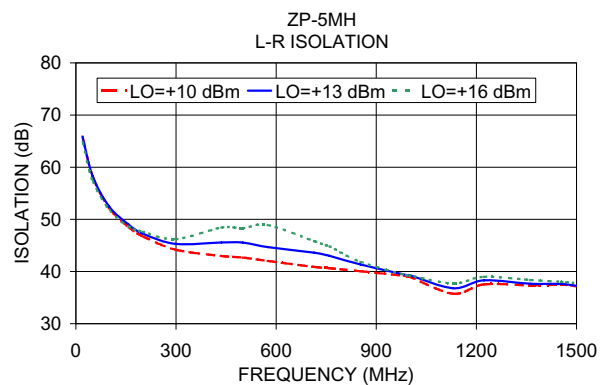
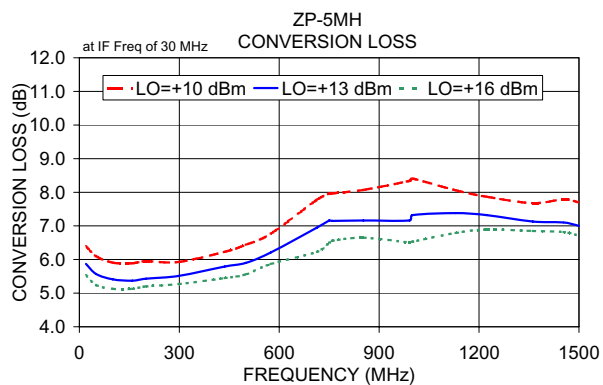
For detailed performance specs
& shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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Performance Charts

ZP-5MH+ ZP-5MH



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For detailed performance specs
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