

Coaxial Frequency Mixer

Level 13 (LO Power +13 dBm) 50 to 1000 MHz

ZP-2MH+ ZP-2MH

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, 6.0 dB typ.
- wideband, 50 to 1000 MHz
- excellent L-R isolation, 47 dB typ., L-I, 47 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- cellular
- instrumentation



Generic photo used for illustration purposes only

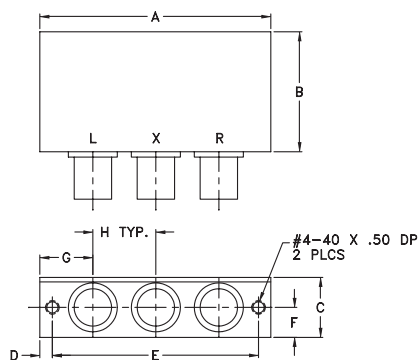
CASE STYLE: GG60

Connectors	Model
BNC	ZP-2MH(+)
SMA	ZP-2MH-S(+)

+RoHS Compliant

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

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

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		L		M		U		L		M		U	
		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
50-1000	DC-1000	6.0	0.25	7.5	9.0	58	40	47	30	37	25	55	35	47	20	32	18

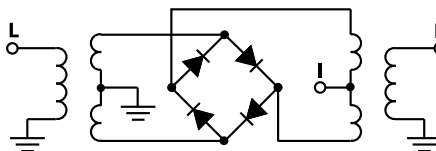
1 dB COMP.: +9 dBm typ.

L = 50-100 MHz M = 100-500 MHz 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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
50.00	80.00	5.81	57.10	55.26	1.03	2.51
100.00	70.00	5.85	51.37	49.62	1.05	2.39
129.17	99.17	5.79	49.27	47.63	1.07	2.41
200.00	170.00	5.74	46.10	44.54	1.10	2.28
208.33	178.33	5.73	45.84	44.23	1.13	2.36
287.50	257.50	5.70	43.58	42.34	1.17	2.26
340.28	310.28	5.67	42.34	40.78	1.19	2.29
366.67	336.67	5.69	41.82	40.13	1.21	2.28
445.83	415.83	5.72	40.63	37.78	1.26	2.29
498.61	468.61	5.75	39.34	36.04	1.28	2.29
500.00	470.00	5.75	39.33	36.00	1.29	2.28
551.39	521.39	5.86	38.49	34.15	1.33	2.32
630.56	600.56	5.90	38.05	32.59	1.38	2.35
683.33	653.33	6.06	38.00	31.67	1.41	2.33
709.72	679.72	6.12	38.21	31.02	1.43	2.30
788.89	758.89	6.33	38.31	29.48	1.49	2.44
868.06	838.06	6.58	37.78	28.55	1.53	2.37
947.22	917.22	6.88	37.88	27.56	1.60	2.48
973.61	943.61	6.98	37.84	27.05	1.62	2.49
1000.00	970.00	7.05	37.64	26.57	1.64	2.45

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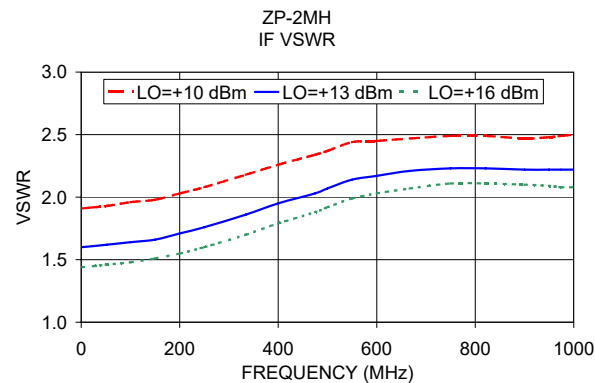
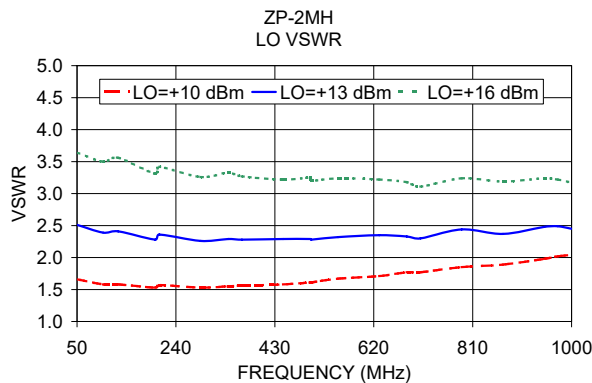
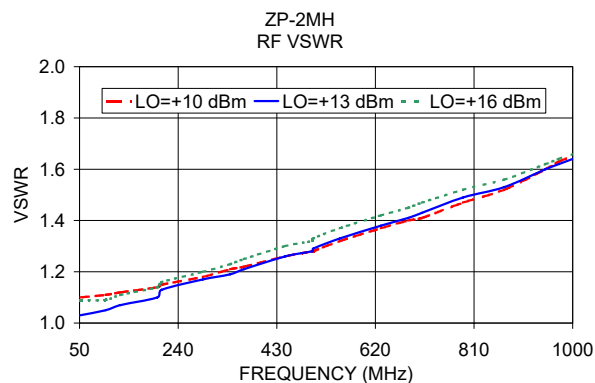
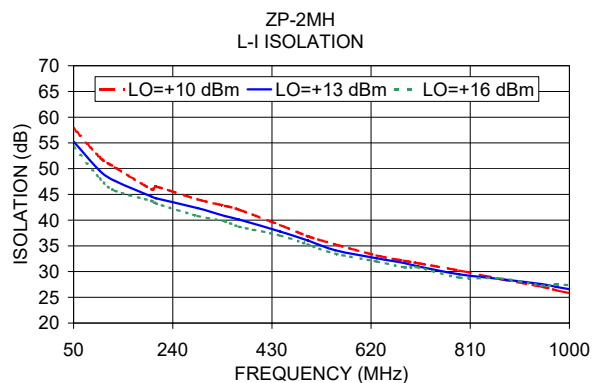
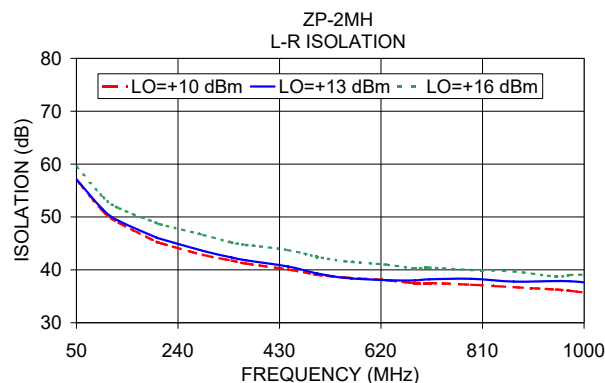
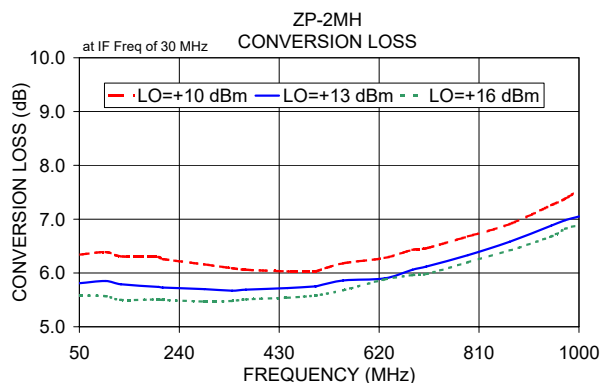


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Performance Charts

ZP-2MH+
ZP-2MH



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