

Coaxial Frequency Mixer

Level 13 (LO Power +13 dBm) 0.15 to 400 MHz

ZP-3MH+
ZP-3MH



BNC version shown
CASE STYLE: GG60

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, 5.0 dB typ.
- high L-R isolation, 46 dB typ., L-I, 42 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation

Connectors	Model	Price	Qty.
BNC	ZP-3MH(+)	\$43.95 ea.	(1-9)
SMA	ZP-3MH-S+	\$48.95 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			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.15-400	DC-400	5.0	0.33	7.0	8.0	60	50	46	30	35	25	60	40	42	25	35	20

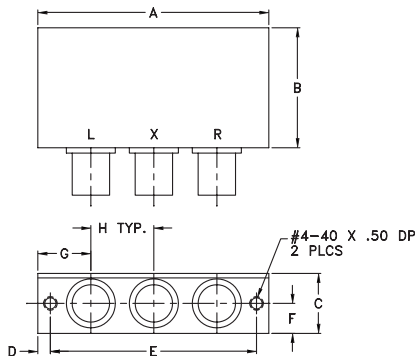
1 dB COMP.: +9 dBm typ.

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 $f_U/2$]

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	VSWR RF Port (:1)	Frequency (MHz)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO Port (:1)
RF	LO						
		LO +13dBm	LO +13dBm		LO +13dBm	LO +13dBm	LO +13dBm
0.15	30.15	5.48	1.53	10.50	59.22	67.83	1.72
0.20	30.20	5.31	1.45	14.50	57.31	65.51	1.71
0.30	30.30	5.27	1.39	18.50	55.80	63.82	1.71
0.40	30.40	5.21	1.37	22.50	54.49	62.93	1.69
0.50	30.50	5.16	1.36	26.50	53.38	61.95	1.70
1.00	31.00	5.09	1.35	30.50	52.42	61.07	1.69
5.00	35.00	4.99	1.34	31.00	52.30	61.12	1.68
10.00	40.00	4.96	1.34	35.10	51.52	60.51	1.68
20.00	50.00	4.88	1.33	40.10	50.70	60.05	1.68
50.10	80.10	4.93	1.32	50.10	49.38	59.05	1.68
75.10	105.10	4.98	1.30	55.10	48.79	58.41	1.68
100.10	130.10	4.99	1.27	105.10	44.38	48.52	1.69
150.10	180.10	5.05	1.21	130.10	42.61	44.85	1.71
200.10	230.10	5.17	1.13	180.10	40.40	39.44	1.75
250.10	280.10	5.36	1.06	205.10	38.48	37.29	1.80
300.10	330.10	5.43	1.10	255.10	37.59	35.97	1.86
325.10	355.10	5.57	1.14	305.10	37.44	32.99	1.94
350.10	380.10	5.68	1.12	330.10	36.46	31.87	1.97
375.10	405.10	6.04	1.09	380.10	35.06	30.61	2.12
400.10	430.10	6.39	1.18	405.10	35.05	29.79	2.17

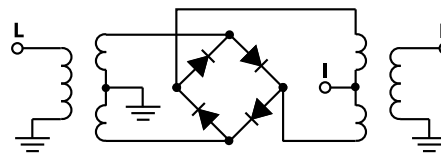
Outline Drawing



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 Schematic



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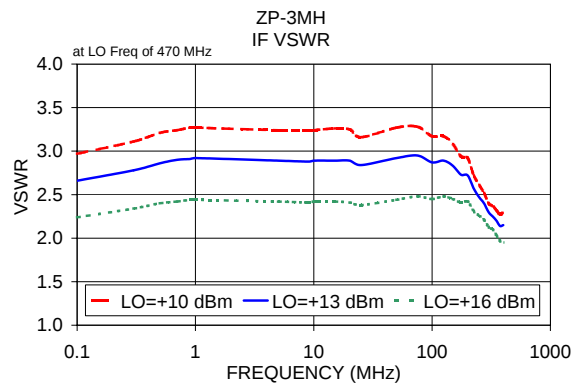
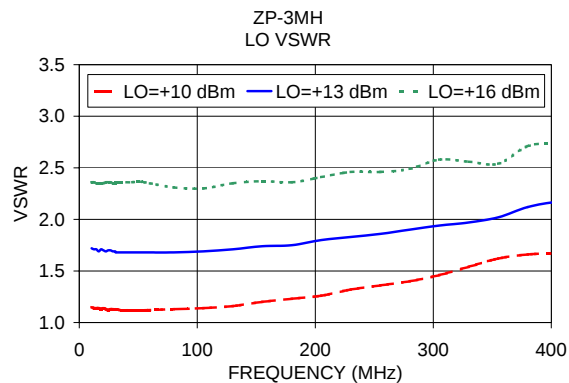
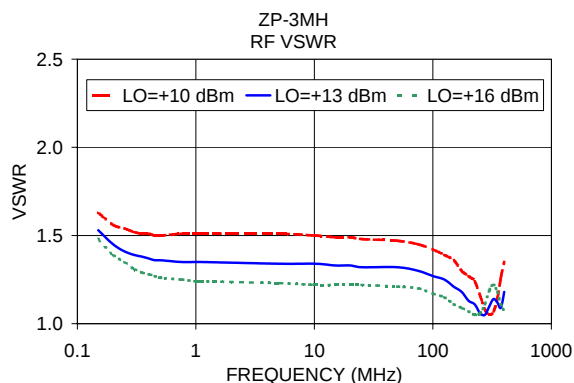
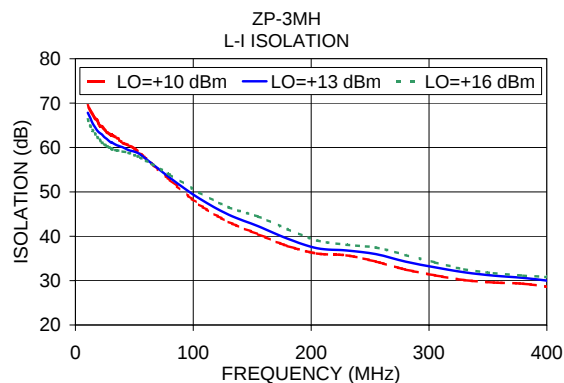
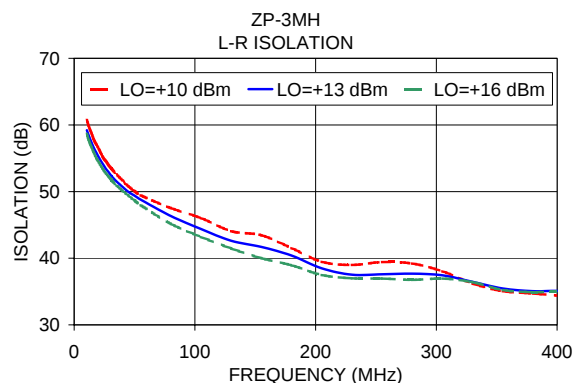
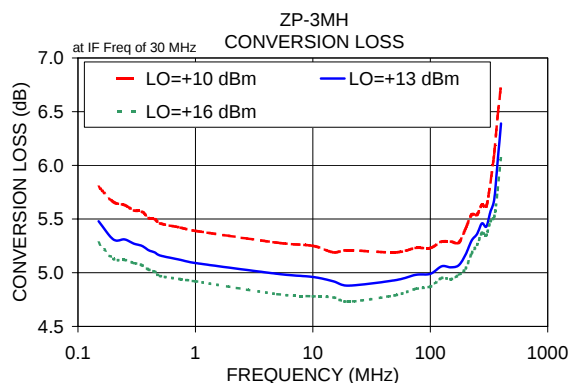
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Performance Charts

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IF/RF MICROWAVE COMPONENTS

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