

Coaxial Frequency Mixer

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

ZP-3MH+



BNC version shown

CASE STYLE: GG60

Connectors Model

BNC ZP-3MH+

SMA ZP-3MH-S+

+RoHS Compliant

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

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

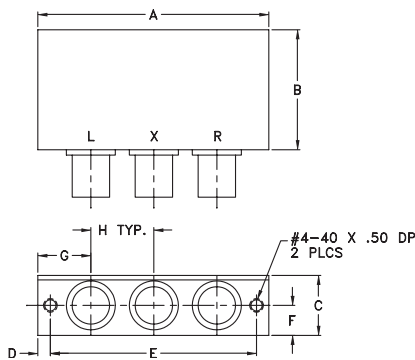
Features

- 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

Outline Drawing



Outline Dimensions (inch/mm)

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 Max.	8.0	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

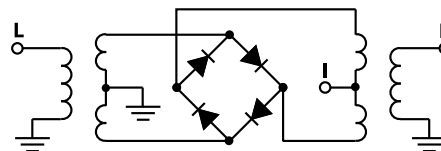
1 dB COMP.: +9 dBm typ.

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	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

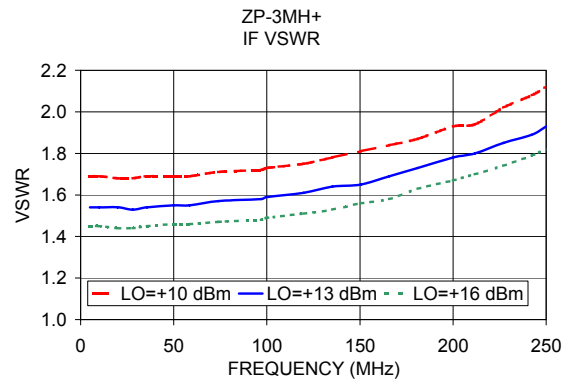
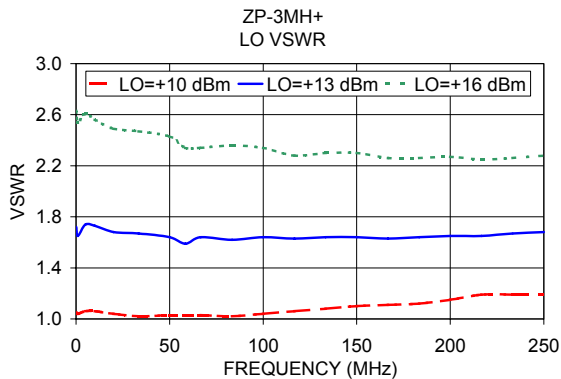
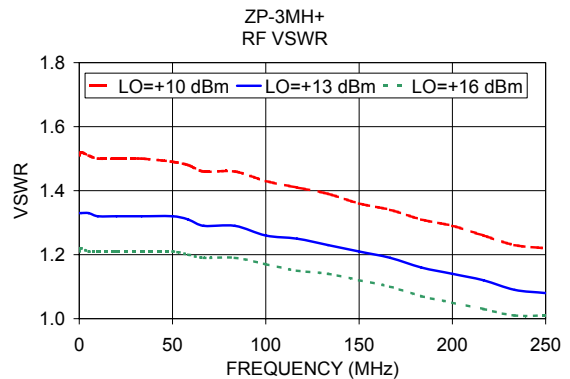
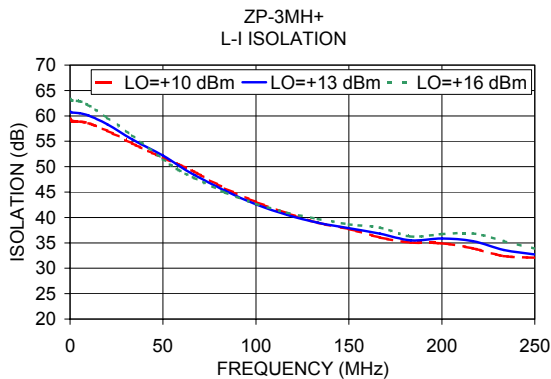
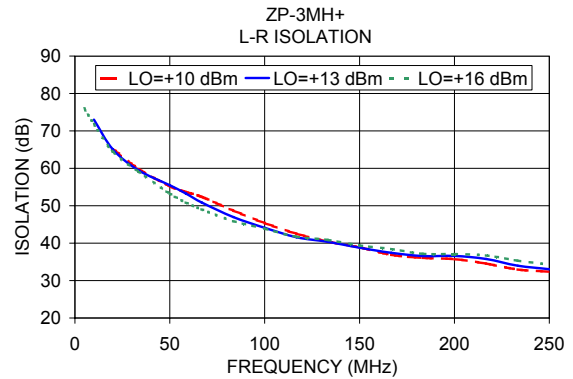
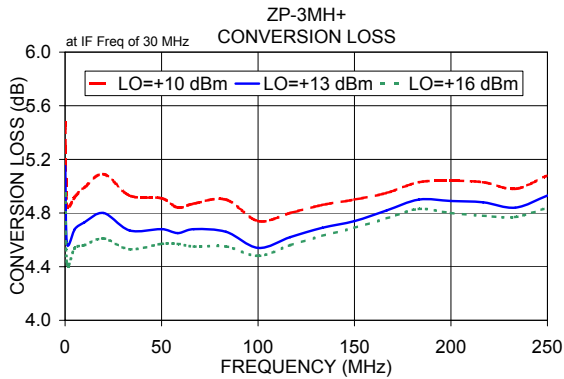
Electrical Schematic



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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