

Coaxial Frequency Mixer

Level 10 (LO Power +10 dBm) 0.15 to 400 MHz

ZP-3LH+

Maximum Ratings

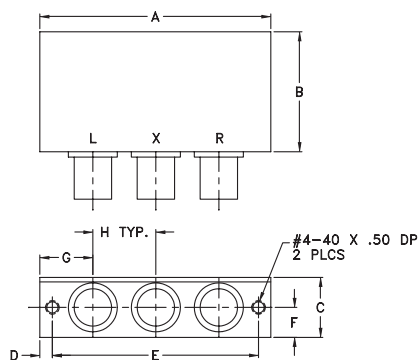
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

Coaxial Connections

LO	L
RF	R
IF	X

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

Features

- low conversion loss, 4.8 dB typ.
- high L-R isolation, 51 dB typ., L-I, 45 dB typ.
- IF response to DC
- rugged shielded case

Applications

- VHF/UHF
- instrumentation



Generic photo used for illustration purposes only

CASE STYLE: GG60

Connectors	Model
BNC	ZP-3LH+
SMA	ZP-3LH-S+

+RoHS Compliant

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		L		M		U		L		M		U	
		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.15-400	DC-400	4.8	0.37	7.0	8.0	67	50	51	30	40	25	67	40	45	25	34	20

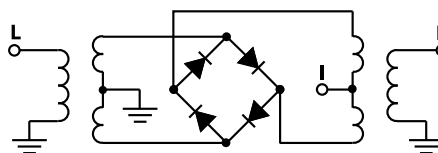
1 dB COMP.: +5 dBm typ.

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)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
0.15	30.15	4.98	69.38	85.98	1.21	2.67
0.30	30.30	4.90	69.38	85.28	1.15	2.64
0.50	30.50	4.83	69.26	86.26	1.10	2.57
1.00	31.00	4.74	69.26	83.06	1.06	2.52
1.50	31.50	4.69	69.08	80.98	1.03	2.36
2.00	32.00	4.66	68.95	78.75	1.02	2.40
5.00	35.00	4.62	68.20	71.20	1.01	2.33
10.00	40.00	4.59	66.47	65.07	1.02	2.31
20.00	50.00	4.68	63.23	59.53	1.02	2.25
50.00	80.00	4.66	56.07	50.61	1.02	2.25
57.27	87.27	4.67	54.97	49.44	1.01	2.29
100.00	70.00	4.67	50.23	45.42	1.01	2.25
114.39	84.39	4.68	48.98	45.06	1.01	2.28
171.51	14.15	4.80	45.17	42.49	1.01	2.33
200.00	170.00	4.81	42.29	40.27	1.01	2.44
228.64	198.64	4.90	41.00	37.35	1.04	2.39
285.76	255.76	5.11	48.00	34.00	1.09	2.41
342.88	312.88	5.17	39.79	33.43	1.20	2.58
385.72	356.72	5.29	34.24	31.62	1.23	2.76
400.00	370.00	5.48	34.34	30.09	1.27	2.78

Electrical Schematic



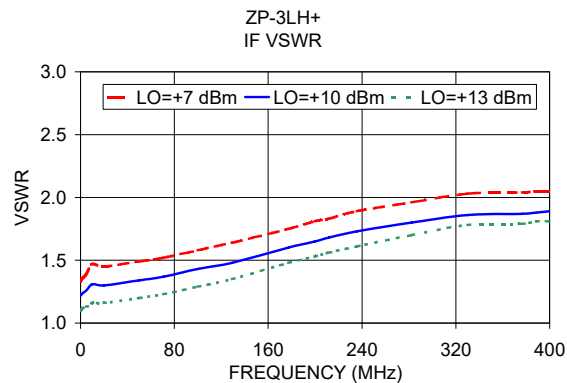
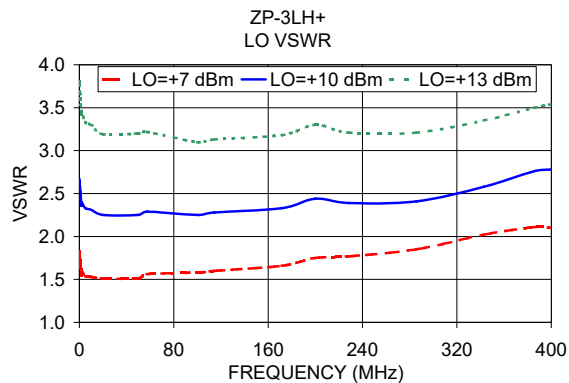
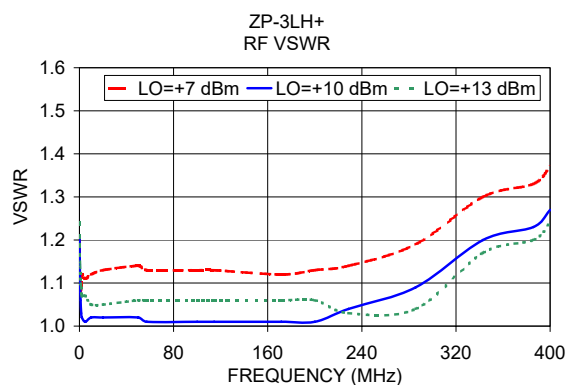
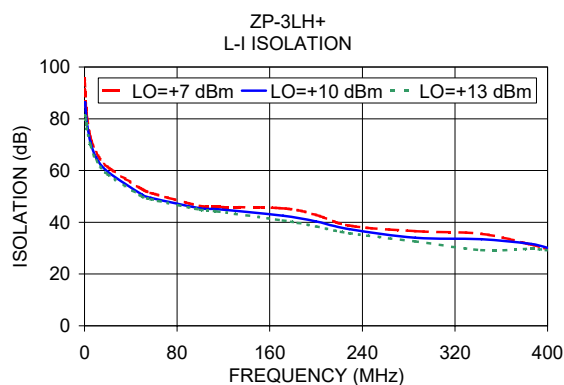
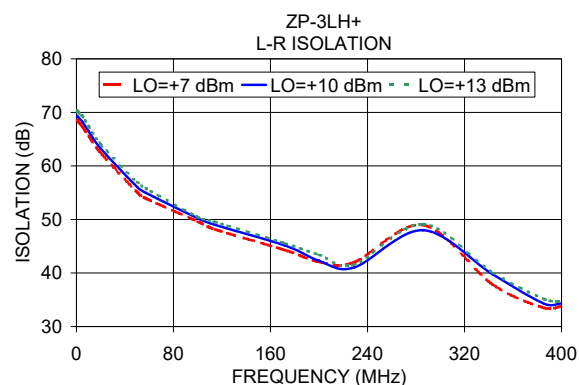
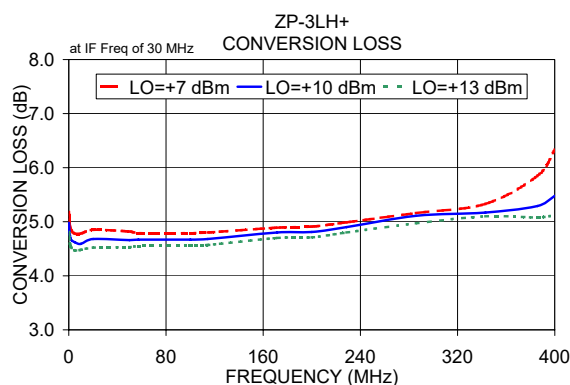
Notes

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