

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 2 to 600 MHz

ZP-1+

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

Features

- low conversion loss, 5.85 dB typ.
- IF response to DC
- high L-R isolation, 42 dB typ., L-L, 47 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation



BNC version shown

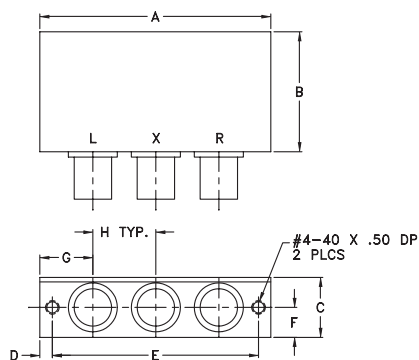
CASE STYLE: GG60

Connectors	Model
BNC	ZP-1+
SMA	ZP-1-S+

+RoHS Compliant

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

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.	L		M		U		L		M		U	
		$\bar{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
2-600	DC-600	5.85	0.10	7.0	8.0	60	50	42	30	37	25	60	45	47	30	36	22

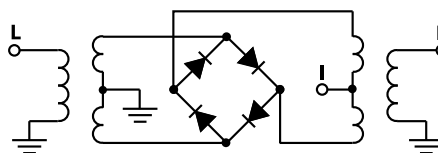
1 dB COMP.: +1 dBm typ.

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 +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
2.00	32.00	6.81	81.85	72.15	1.56	2.71
4.00	34.00	6.40	76.35	68.25	1.31	2.64
5.00	35.00	6.34	74.35	66.65	1.25	2.62
10.00	40.00	6.25	69.58	62.18	1.15	2.47
20.00	50.00	6.21	64.25	57.65	1.11	2.51
50.00	80.00	6.13	57.73	50.60	1.10	2.46
81.73	51.73	6.16	53.89	46.89	1.13	2.41
100.00	70.00	6.18	52.31	45.35	1.14	2.37
161.47	131.47	6.08	49.28	42.03	1.20	2.31
200.00	170.00	6.03	47.46	40.24	1.27	2.29
241.20	211.20	6.04	46.41	38.76	1.33	2.26
281.07	251.07	6.04	45.16	37.18	1.38	2.28
300.00	270.00	6.09	44.55	36.84	1.42	2.30
320.93	290.93	6.08	44.04	35.94	1.50	2.31
400.00	370.67	5.99	42.93	33.45	1.58	2.32
480.40	450.40	6.06	40.46	30.91	1.66	2.33
500.00	470.00	6.11	40.16	30.63	1.71	2.33
560.13	530.13	6.15	39.99	29.30	1.77	2.35
580.07	550.07	6.19	40.02	29.24	1.86	2.36
600.00	570.00	6.26	39.76	28.69	1.88	2.38

Electrical Schematic



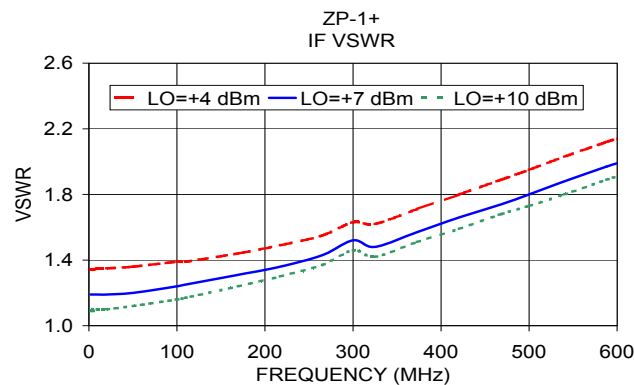
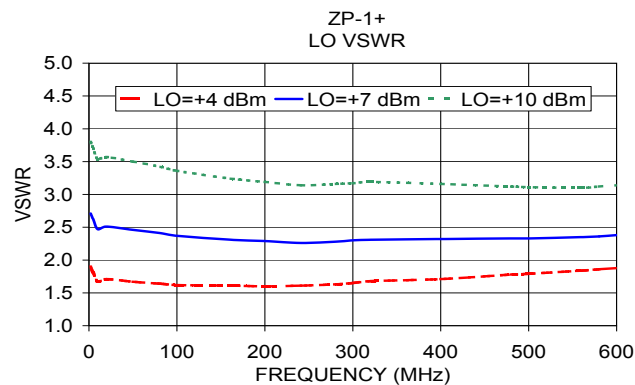
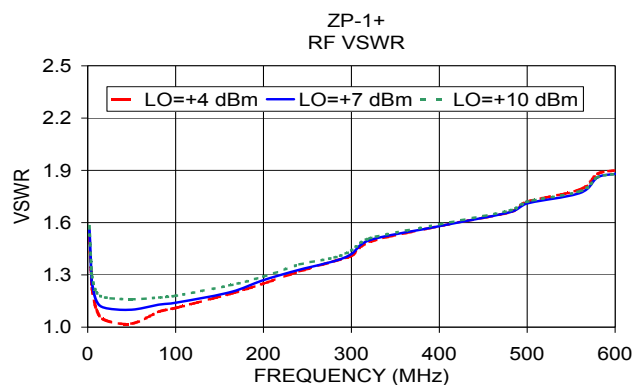
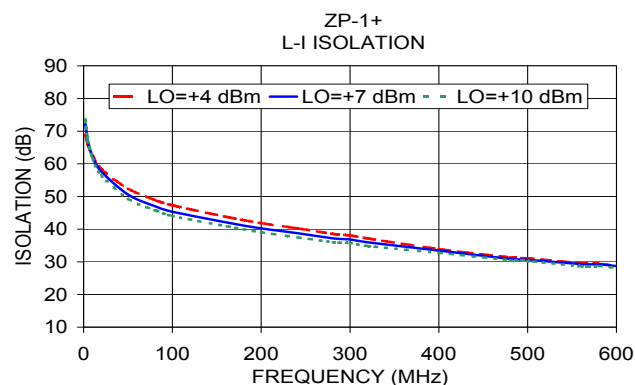
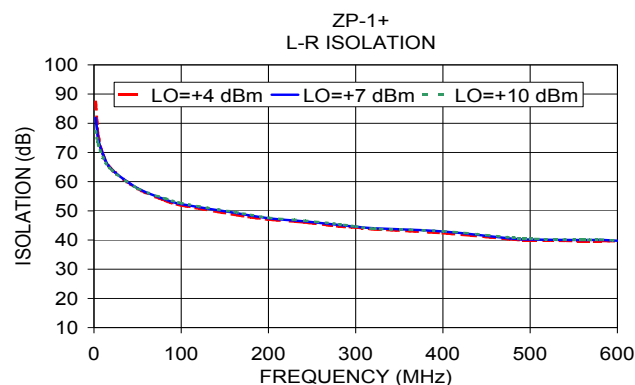
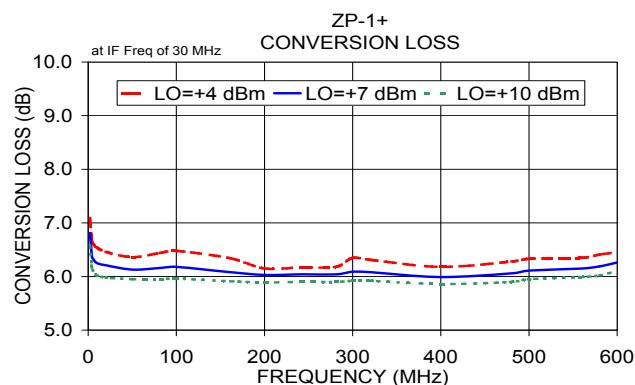
Notes

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