

Coaxial Frequency Mixer

ZP-10514+ ZP-10514

Level 7 (LO Power +7 dBm) 0.2 to 500 MHz



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, 5.18 dB typ.
- high L-R isolation, 50 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- instrumentation

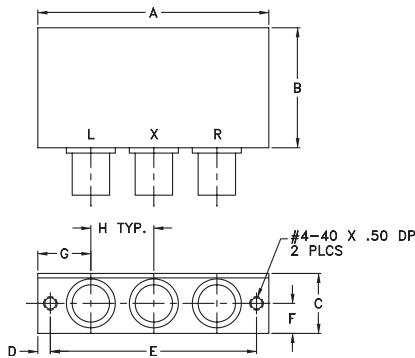
BNC version shown
CASE STYLE: GG60

Connectors	Model
BNC	ZP-10514+
SMB	ZP-10514-SMB(+)
SMA	ZP-10514-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)								
		Mid-Band m		Total Range Max.		L	M	U	L	M	U					
LO/RF f_L-f_U	IF \bar{X} σ Max.	\bar{X}	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
0.2-500	DC-500	5.18	0.10	7.0	8.5	55	45	50	35	35	30	50	40	36	30	20

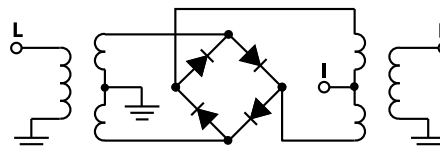
1 dB COMP.: +1 dBm typ.

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
0.20	30.20	8.36	59.54	51.65	1.28	1.46
0.50	30.50	6.85	57.86	50.98	1.26	1.41
2.00	32.00	6.13	56.96	50.94	1.25	1.39
10.00	40.00	5.43	55.15	50.65	1.24	1.48
32.45	62.45	5.43	51.84	49.39	1.21	1.45
64.69	94.69	5.61	48.95	47.53	1.20	1.42
100.00	70.00	5.53	47.52	46.53	1.20	1.39
145.30	115.30	5.74	45.03	44.48	1.19	1.38
177.55	147.55	5.41	42.85	42.69	1.17	1.36
200.00	170.00	5.73	41.70	41.72	1.17	1.37
225.92	195.92	5.49	40.73	40.61	1.16	1.36
258.16	228.16	5.71	39.01	39.00	1.16	1.42
290.41	260.41	5.50	38.47	38.33	1.16	1.43
322.65	292.65	5.79	37.73	37.34	1.19	1.51
354.90	324.90	5.52	36.24	35.86	1.20	1.53
387.14	357.14	5.63	35.26	34.80	1.22	1.58
419.39	389.39	5.74	35.03	34.31	1.24	1.58
435.51	405.51	5.66	35.44	34.71	1.26	1.62
467.75	437.75	6.15	35.03	34.13	1.30	1.67
500.00	470.00	5.98	34.57	33.52	1.32	1.65

Electrical Schematic

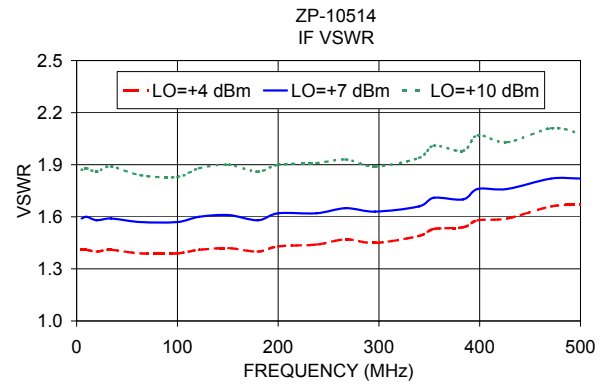
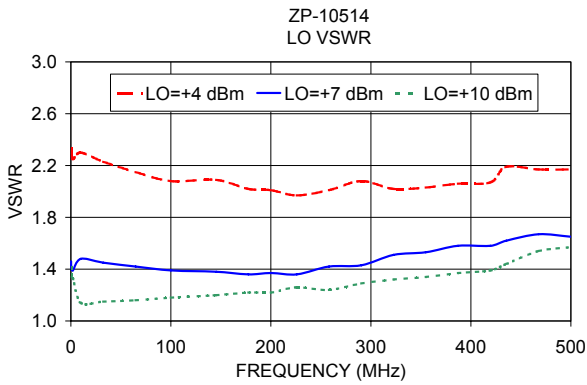
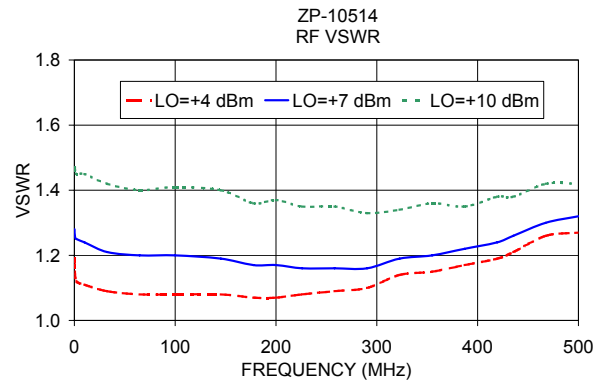
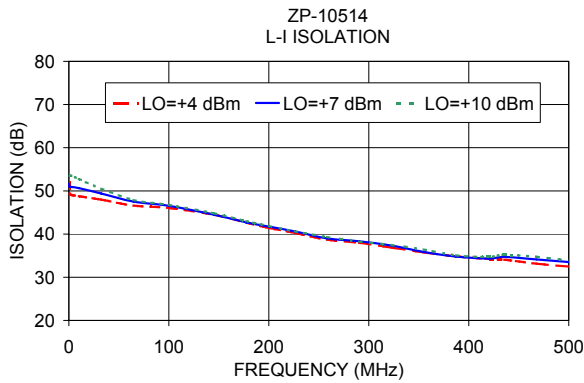
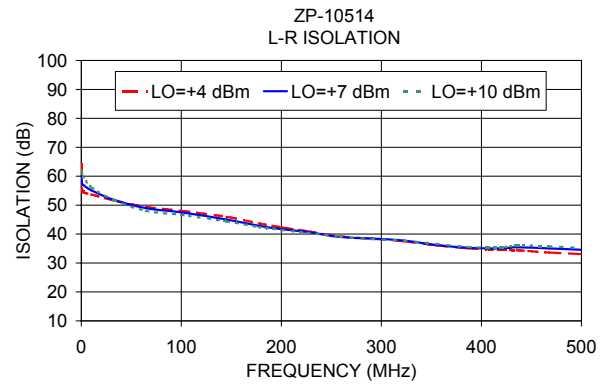
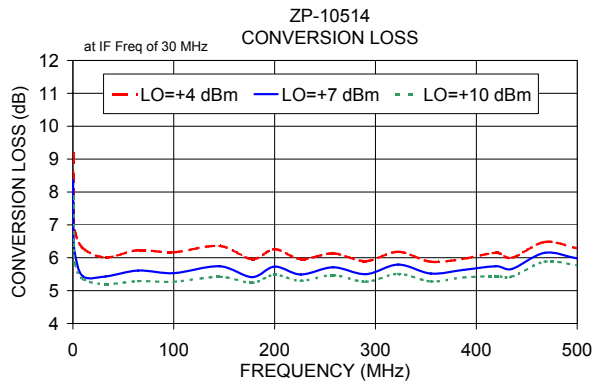


Notes

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Performance Charts



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