

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 5 to 1500 MHz

ZX05-5+



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-5-S+

+RoHS Compliant

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

Maximum Ratings

Operating Temperature	-40°C to 85°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	1
RF	2
IF	3

Features

- rugged construction
- small size
- low conversion loss
- high L-R isolation
- protected by US Patents 6,133,525 & 6,790,049

Applications

- cellular
- PCS
- instrumentation
- satellite communication

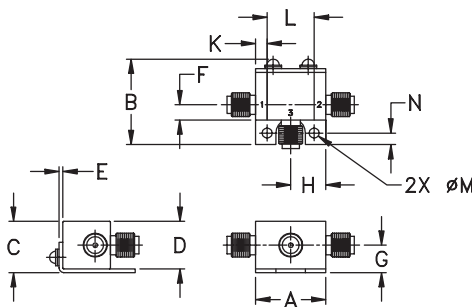
Electrical Specifications (T_{AMB}=25°C)

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3 at center band (dBm)					
		L	M	U	L	M	U						
5-1500	DC-1000	50	40	25	33	23	50	40	30	20	20	10	15

1 dB COMP: +1 dBm typ.
Positive detection: positive output with in-phase RF & LO signals

L = low range [f_1 to $10 f_1$]
M = mid range [$10 f_1$ to $f_1/2$]
U = upper range [$f_1/2$ to f_1]

Outline Drawing



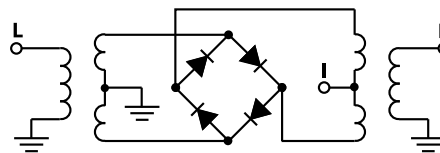
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	
.74	.90	.54	.50	.04	.16	.29	
18.80	22.86	13.72	12.70	1.02	4.06	7.37	
H	J	K	L	M	N	wt	
.37	--	.122	.496	.106	.122	grams	
9.40	--	3.10	12.60	2.69	3.10	20.0	

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
5.10	35.10	6.93	82.10	96.28	1.48	1.83
35.10	65.10	6.51	65.10	76.81	1.38	1.80
50.10	80.10	6.48	61.74	69.65	1.37	1.80
100.10	70.10	6.60	55.18	56.54	1.36	1.77
171.43	141.43	6.54	50.58	45.84	1.35	1.80
254.10	224.10	6.51	47.52	39.83	1.33	1.78
336.77	306.77	6.56	45.52	36.24	1.32	1.78
419.43	389.43	6.63	43.47	34.05	1.31	1.78
502.10	472.10	6.58	42.13	31.97	1.30	1.81
584.77	554.77	6.56	40.92	30.53	1.28	1.82
667.43	637.43	6.64	37.49	29.33	1.25	1.84
750.10	720.10	6.78	35.27	28.03	1.24	1.87
831.53	801.53	6.81	34.84	25.74	1.19	1.90
934.39	904.39	6.70	33.83	23.60	1.09	1.91
1037.24	1007.24	6.59	33.85	22.24	1.05	1.97
1140.10	1110.10	6.66	33.64	21.45	1.20	2.09
1242.96	1212.96	7.02	32.75	20.75	1.41	2.22
1345.81	1315.81	7.39	31.63	18.60	1.62	2.15
1448.67	1418.67	7.75	29.54	17.12	1.84	2.01
1500.10	1470.10	7.94	28.84	17.08	1.93	2.06

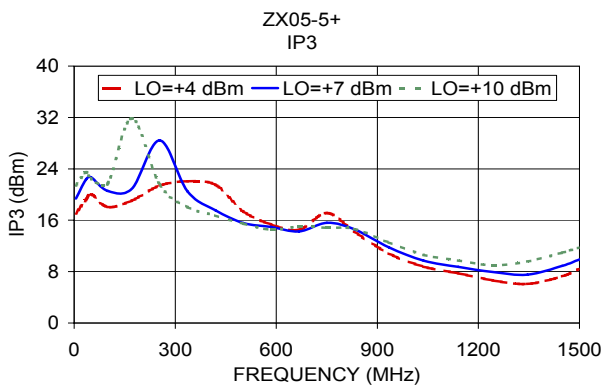
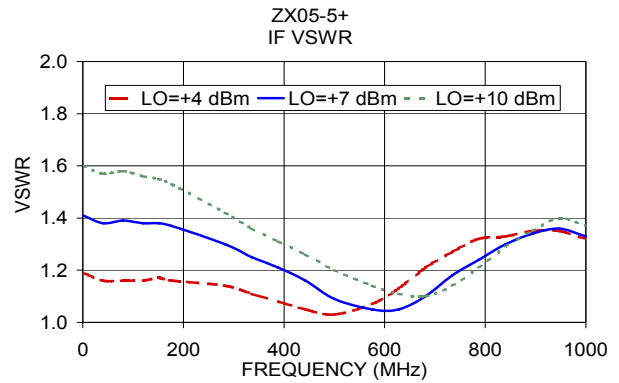
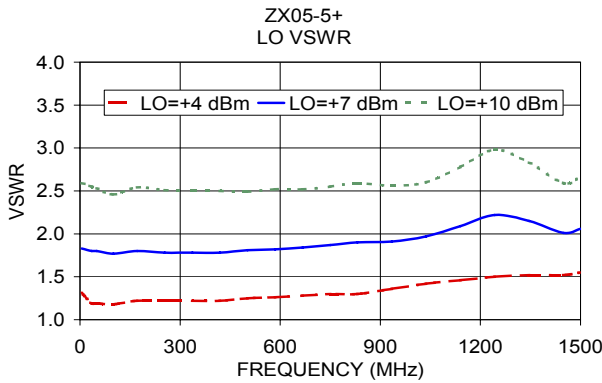
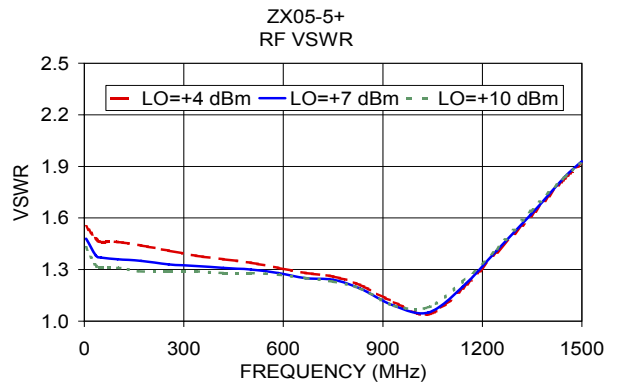
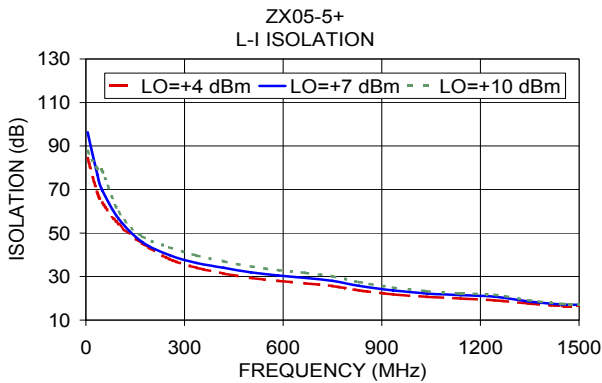
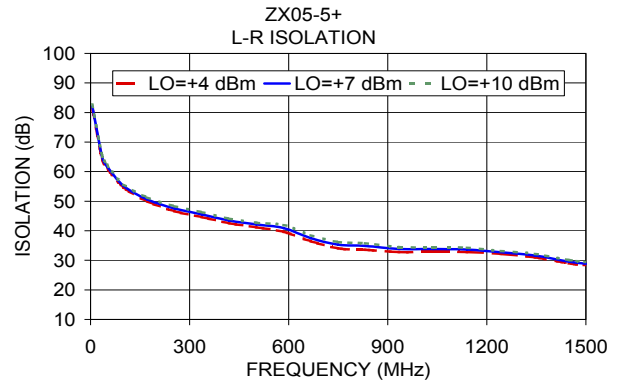
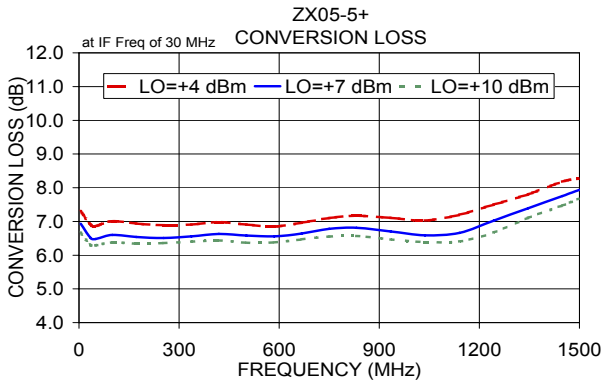
Electrical Schematic



Notes

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