

Frequency Mixer

ZX05-11X-S+

Level 7 (LO Power +7 dBm) 10 to 2000 MHz

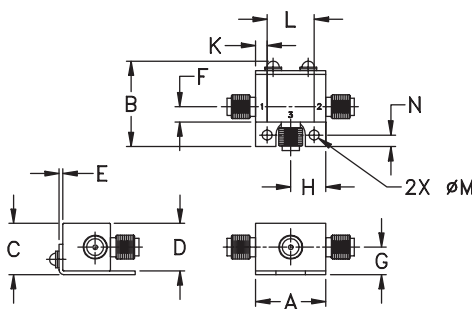
Maximum Ratings

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

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

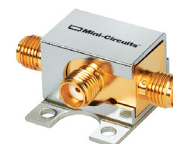
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

Features

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

Applications

- cellular
- PCS
- instrumentation
- satellite communication



Generic photo used for illustration purposes only

CASE STYLE: FL905

Connectors	Model
SMA	ZX05-11X-S+

+RoHS Compliant

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

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

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)				LO-IF ISOLATION (dB)				IP3 at center band (dBm)				
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.*		L	M	U	L	M	U							
		$\bar{X}$	σ	Max.	Max.*							Typ. Min.	Typ. Min.		Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.
10-2000	5-1000	7.1	0.1	8.2	9.8	62	45	36	20	27	18	60	45		37	20	38	20

1 dB COMP.: +1 dBm typ.

* Conversion Loss 10.4 dB Max. at LO/RF 1900-2000 MHz

L = low range [f_L to 10 f_L]

m = mid band [2f_L to f_U/2]

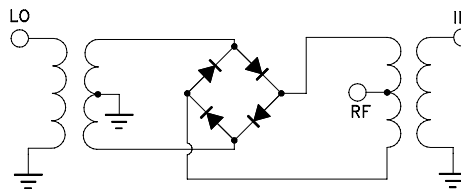
M = mid range [10 f_L to f_U/2]

U = upper range [f_U/2 to f_U]

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
10.10	40.10	6.84	74.97	78.47	1.03	2.59
50.10	80.10	6.84	61.40	64.93	1.03	2.58
100.10	130.10	6.91	55.74	58.48	1.04	2.52
206.16	236.16	6.98	51.92	52.08	1.12	2.54
318.28	288.28	7.08	48.10	48.28	1.20	2.58
430.40	400.40	7.13	44.07	45.47	1.38	2.53
542.52	512.52	7.20	40.20	43.42	1.60	2.54
654.65	624.65	7.32	38.92	41.99	1.84	2.66
766.77	736.77	7.40	35.90	39.98	2.01	2.62
878.89	848.89	7.26	35.13	37.69	1.99	2.63
1000.10	970.10	7.11	33.55	36.59	1.90	2.90
1103.13	1073.13	7.02	30.72	35.49	1.80	2.94
1215.25	1185.25	7.15	29.08	34.26	1.81	2.84
1327.37	1297.37	7.25	29.09	33.25	1.67	2.90
1439.49	1409.49	7.22	31.00	33.11	1.43	2.90
1551.62	1521.62	7.31	33.01	33.10	1.21	2.64
1663.74	1633.74	7.52	30.60	34.88	1.05	2.63
1775.86	1745.86	7.90	27.23	36.31	1.12	2.57
1887.98	1857.98	8.28	25.73	34.43	1.37	2.53
2000.10	1970.10	8.81	26.34	34.73	1.68	3.08

Electrical Schematic



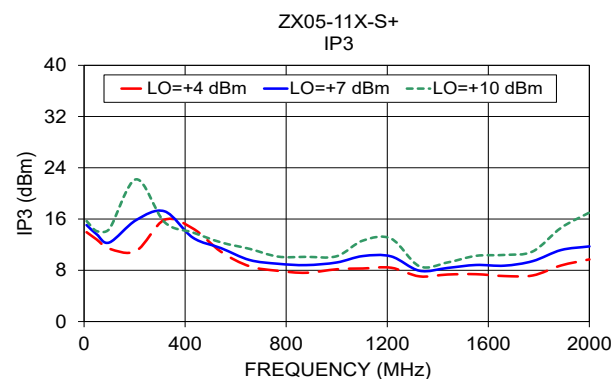
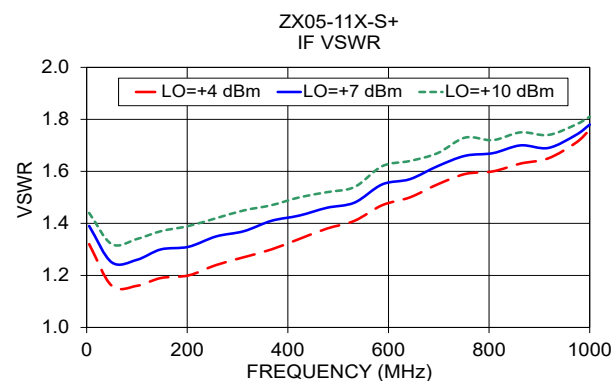
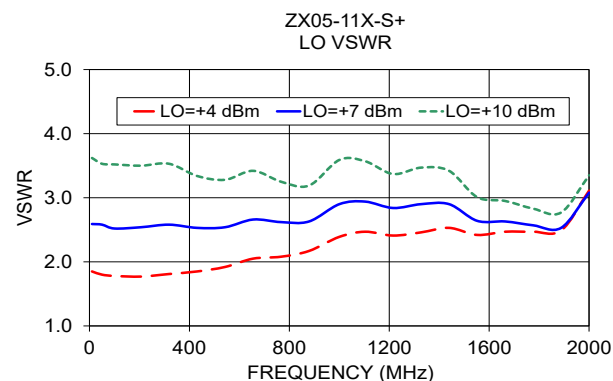
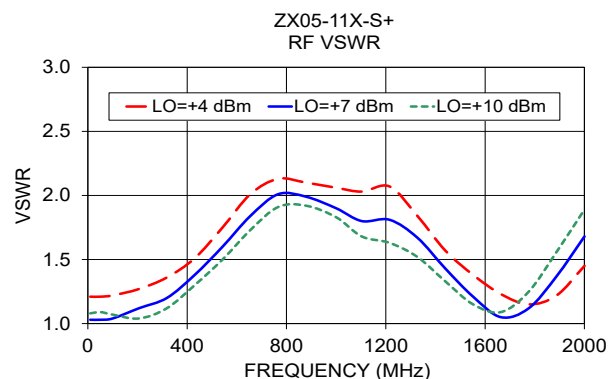
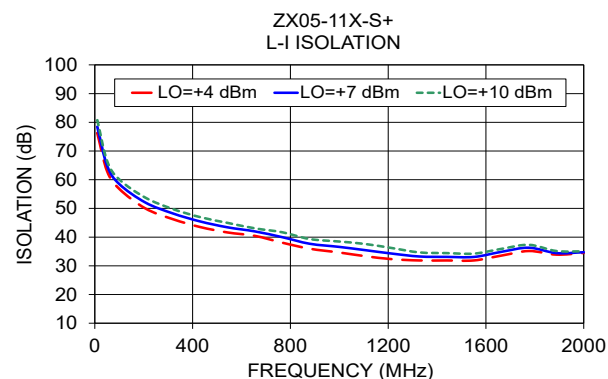
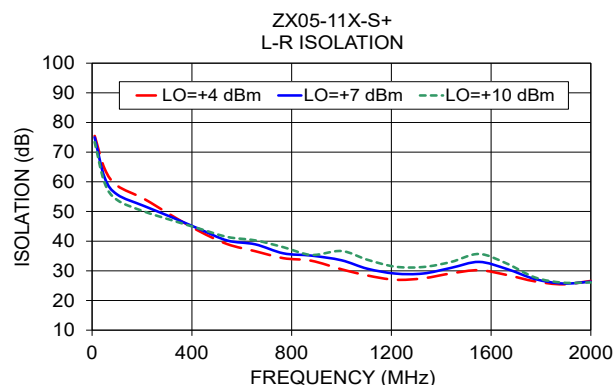
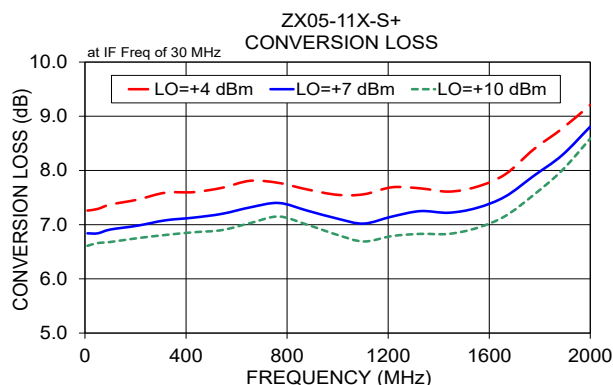
Notes

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Performance Charts

ZX05-11X-S+



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