

Frequency Mixer

ZX05-1LHW-S+

Level 10 (LO Power +10 dBm) 2 to 750 MHz

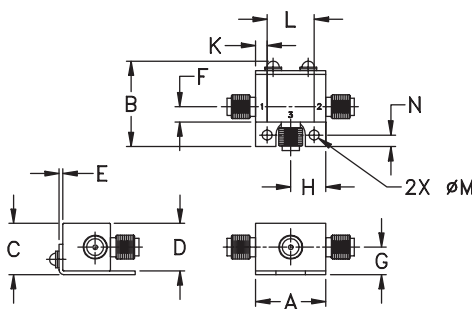
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

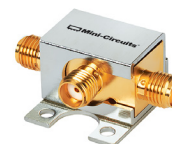
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

Features

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

Applications

- cellular
- PCS
- instrumentation
- satellite communication



Generic photo used for illustration purposes only

CASE STYLE: FL905

Connectors Model
SMA ZX05-1LHW-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	IF	Mid-Band		Total Range		L		M		U		L		M		U		
		$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
2-750	DC-750	5.3	0.1	6.8	8.5	66	50	52	35	46	27	64	40	50	27	40	20	15

1 dB COMP.: +5 dBm typ.

L = low range [f_L to $10 f_L$]
m = mid band [$2 f_L$ to $f_U/2$]

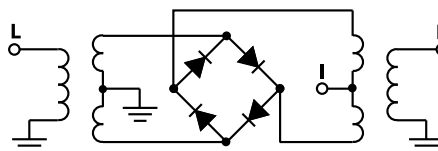
M = mid range [$10 f_L$ to $f_U/2$]

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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
2.10	32.10	5.66	59.62	51.83	1.25	2.36
35.10	65.10	5.32	58.24	51.21	1.07	2.33
75.10	45.10	5.38	55.93	50.03	1.07	2.32
120.10	90.10	5.37	53.75	48.44	1.09	2.31
141.10	111.10	5.36	52.84	47.70	1.10	2.33
183.10	153.10	5.42	51.21	45.39	1.12	2.33
225.10	195.10	5.43	50.01	43.72	1.14	2.36
267.10	237.10	5.50	48.69	42.00	1.16	2.34
309.10	279.10	5.48	48.07	40.61	1.19	2.39
351.10	321.10	5.54	46.97	39.10	1.21	2.33
375.10	345.10	5.53	46.13	38.22	1.22	2.36
414.10	384.10	5.58	44.75	37.04	1.25	2.39
456.10	426.10	5.69	44.54	36.26	1.28	2.34
519.10	489.10	5.82	45.58	35.79	1.32	2.28
540.10	510.10	5.85	45.82	35.82	1.33	2.28
582.10	552.10	5.88	45.49	35.25	1.34	2.39
624.10	594.10	5.88	44.72	34.10	1.33	2.36
666.10	636.10	6.06	42.54	32.43	1.29	2.53
708.10	678.10	6.25	41.92	31.16	1.29	2.45
750.10	720.10	6.52	41.78	30.01	1.35	2.54

Electrical Schematic



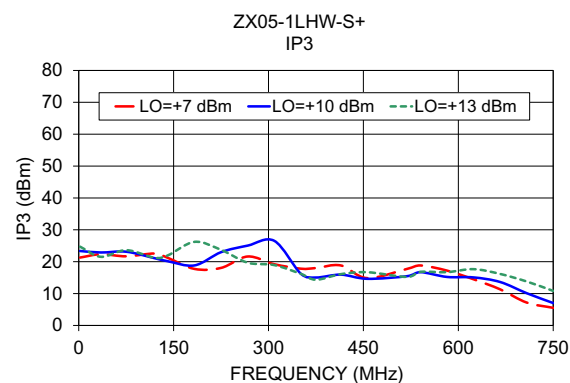
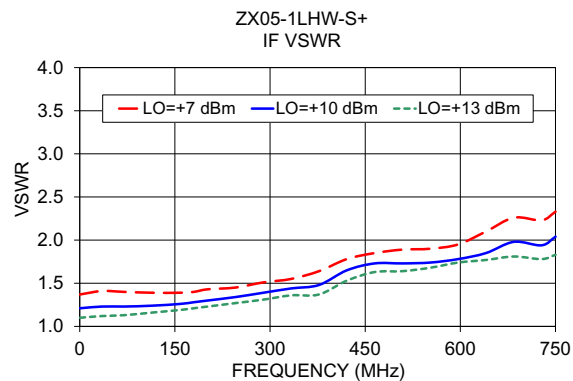
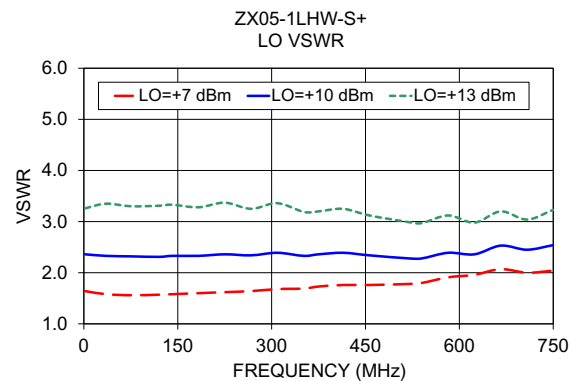
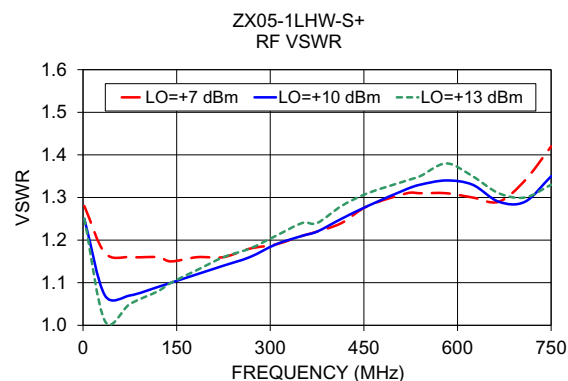
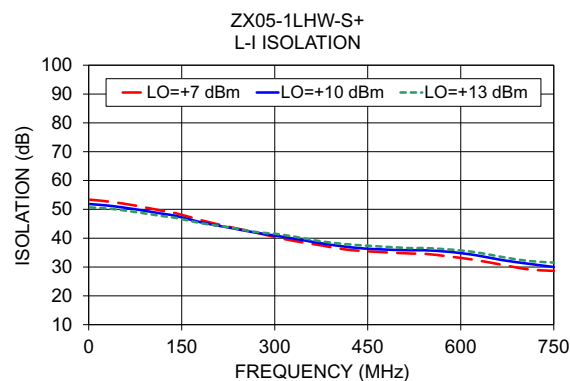
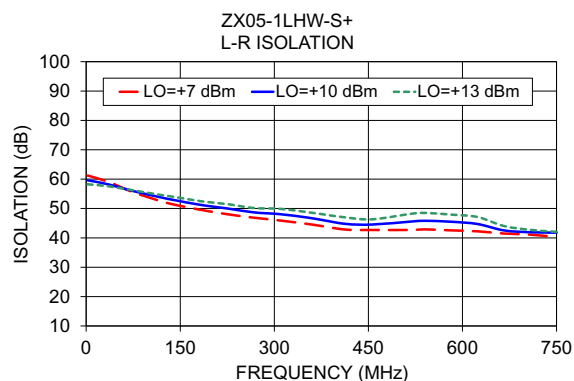
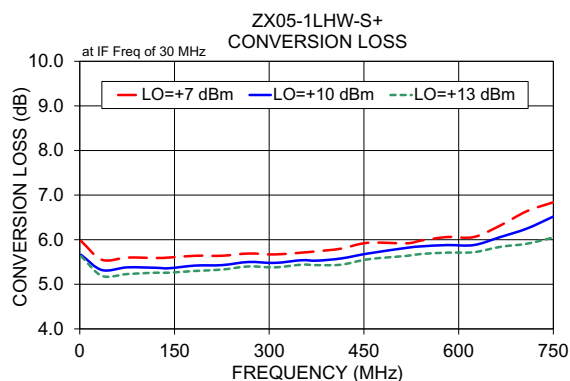
Notes

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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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