

Coaxial Frequency Mixer

ZX05-1LHW-S+

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



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

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

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)		
LO/RF	IF	Mid-Band m		Total Range Max.	L	M	U	L	M	U	L	M	U					
f _L -f _U		\bar{X}	σ	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.			
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.

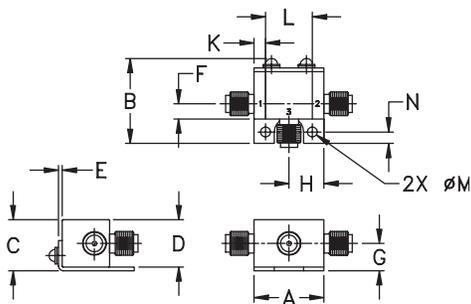
L = low range [f_L to 10 f_L]

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

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

U = upper range [f_L/2 to f_U]

Outline Drawing



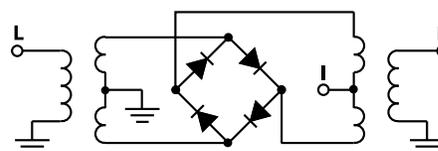
Outline Dimensions (inch/mm)

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 +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

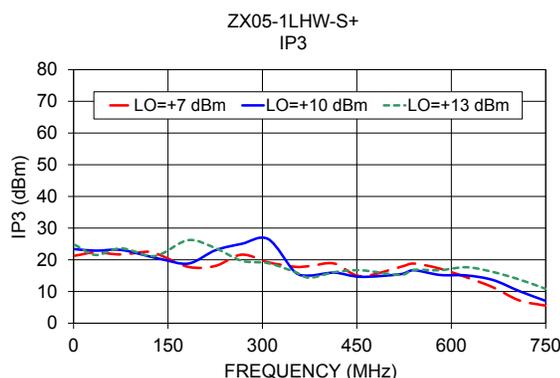
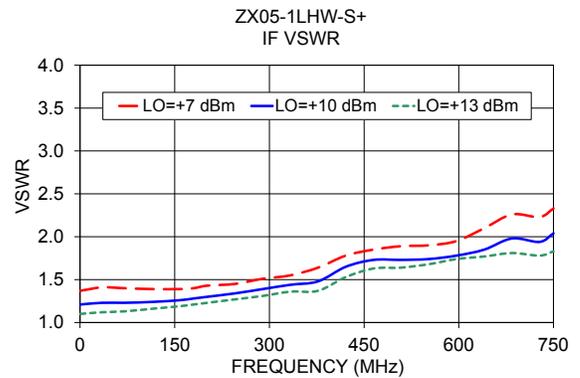
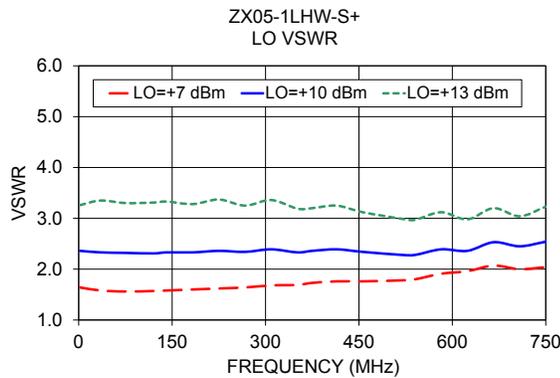
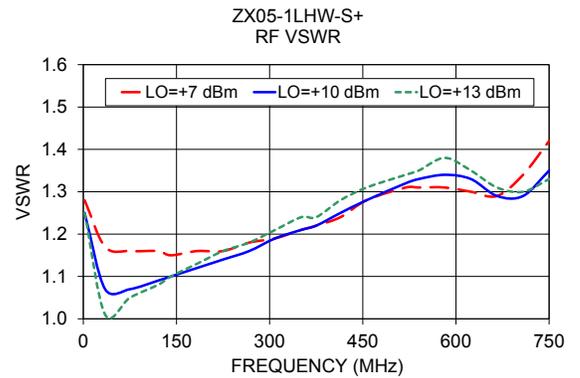
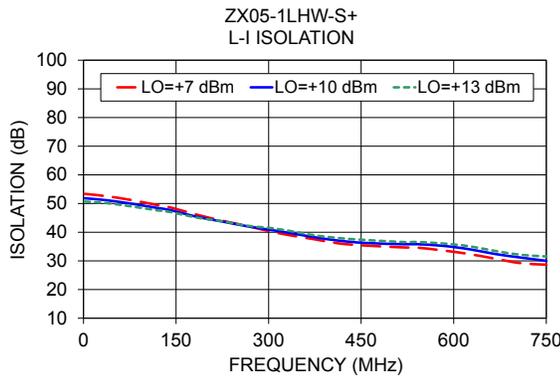
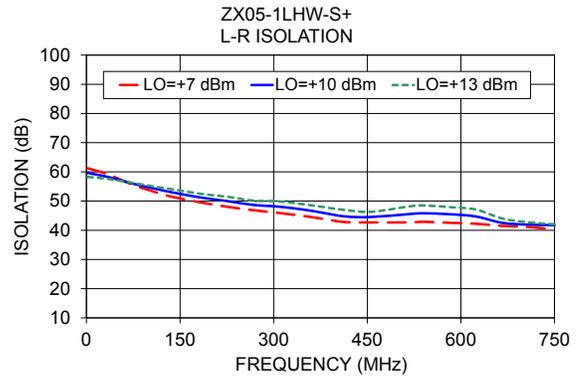
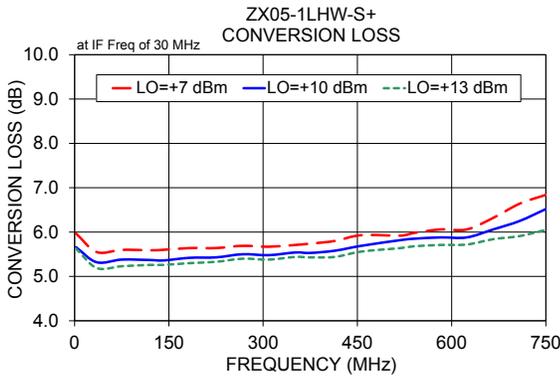
Electrical Schematic



Notes

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