

Frequency Mixer WIDE BAND

Level 10 (LO Power +10 dBm) 824 to 4200 MHz

ZX05-43LH-S+

Maximum Ratings

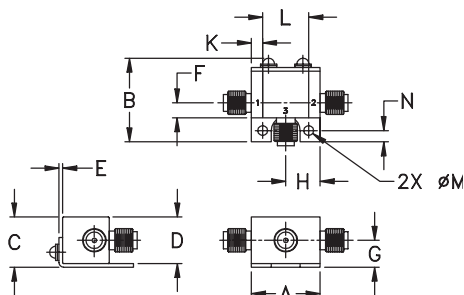
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

LO	2
RF	3
IF	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

Features

- wide bandwidth, 824 to 4200 MHz
- low conversion loss, 6.1 dB typ.
- excellent L-R isolation, 35 dB typ.
- rugged construction
- small size
- useable as up and down converter
- protected by US patents, 6,790,049 and 7,027,795

Applications

- cellular
- defense and weather radar
- defense communications
- PCN
- WCDMA
- WIFI
- blue tooth
- VSAT
- ISM

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS* (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 (dBm)
		Typ.	σ	Max.	Typ.	Min.	Typ.	Min.	
824-4200 LO/RF $f_L - f_U$	IF								
	DC-1500								
	824-2500	6.3	0.1	8.1	35	28	24	7	15
	2500-4200	5.7	0.1	8.8	28	23	20	11	14

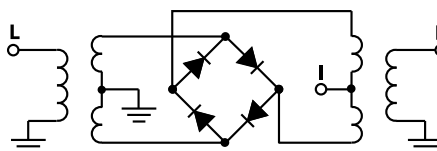
1 dB COMPR.: +5 dBm typ.

* Conversion loss at 30 MHz IF. σ is a measure of repeatability from unit to unit.

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
800.10	830.10	6.97	40.28	24.13	2.20	8.01
1000.10	1030.10	6.80	40.62	26.75	2.24	2.48
1200.10	1230.10	6.21	37.61	30.55	3.04	1.16
1400.10	1430.10	6.26	33.28	34.87	3.09	1.31
1600.10	1630.10	6.28	31.73	26.86	3.01	1.85
1800.10	1830.10	6.68	34.95	19.25	3.22	2.08
2000.10	2030.10	6.80	34.01	12.32	3.50	1.77
2200.10	2230.10	6.66	35.08	12.21	3.40	1.60
2500.10	2530.10	6.78	34.96	15.85	3.10	1.79
2600.10	2630.10	6.60	32.68	17.18	2.99	1.79
2800.10	2830.10	5.72	28.25	19.07	1.83	1.43
3000.10	3030.10	5.15	29.65	21.70	1.15	1.44
3200.10	3230.10	5.21	27.31	26.03	1.33	1.25
3400.10	3430.10	5.55	28.46	24.94	1.28	1.03
3600.10	3630.10	6.03	26.81	21.60	1.83	1.37
3800.10	3830.10	6.15	26.88	18.70	2.24	1.81
4000.10	4030.10	6.95	28.58	19.35	3.12	2.52
4150.10	4180.10	7.00	28.86	16.90	2.90	3.31
4175.10	4205.10	7.13	28.88	17.17	2.99	3.42
4200.10	4230.10	7.19	28.80	16.66	3.16	3.62

Electrical Schematic



Generic photo used for illustration purposes only

CASE STYLE: FL905

Connectors	Model
SMA	ZX05-43LH-S+

+RoHS Compliant

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

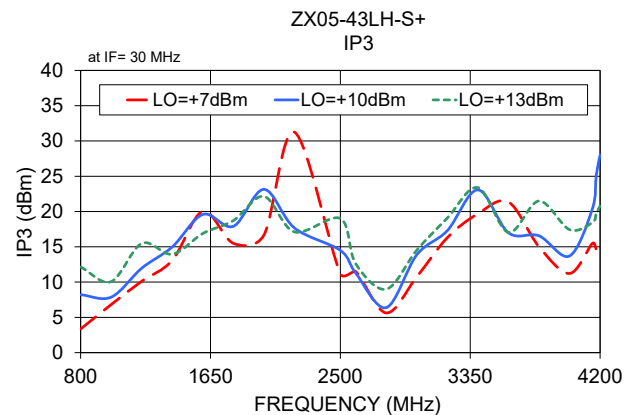
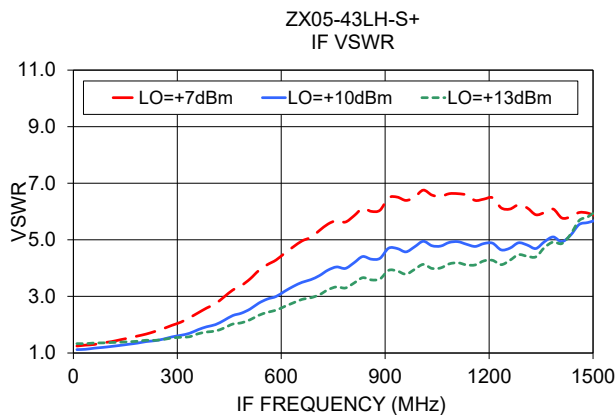
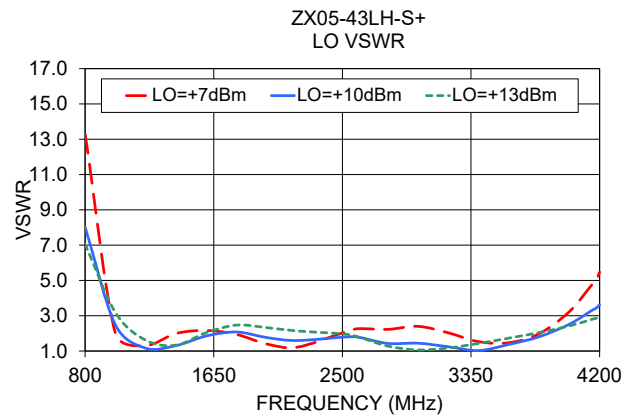
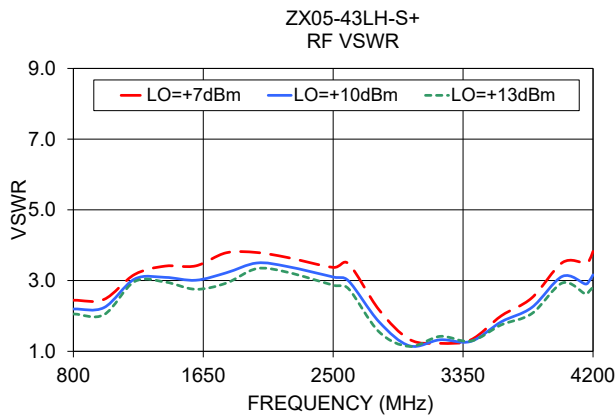
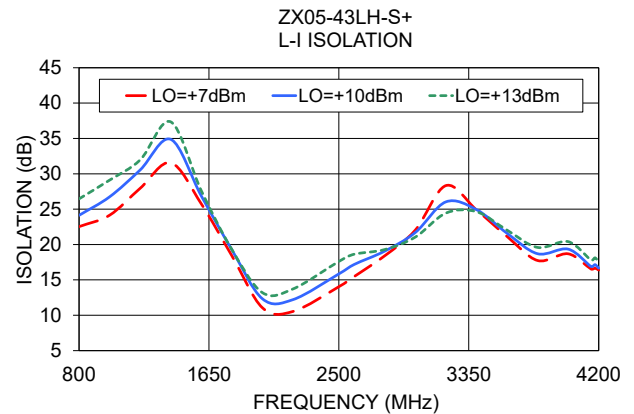
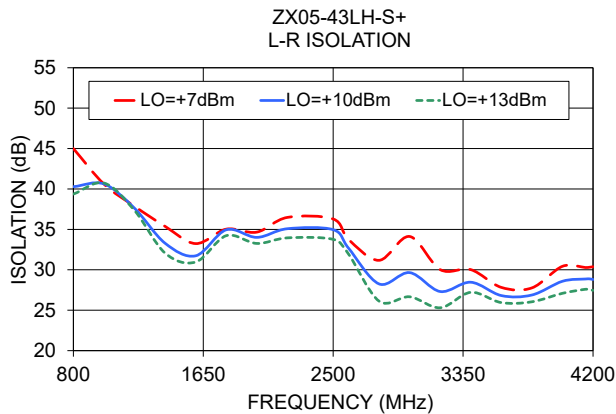
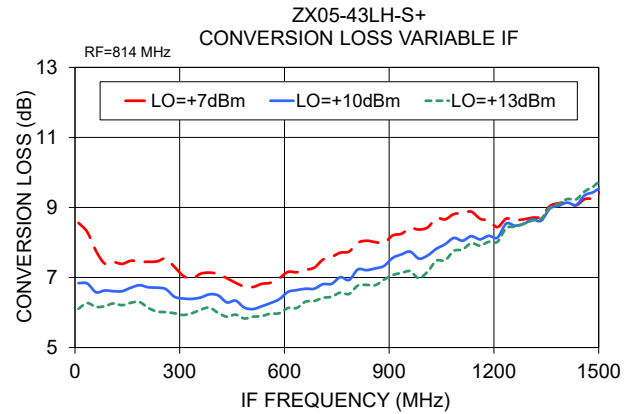
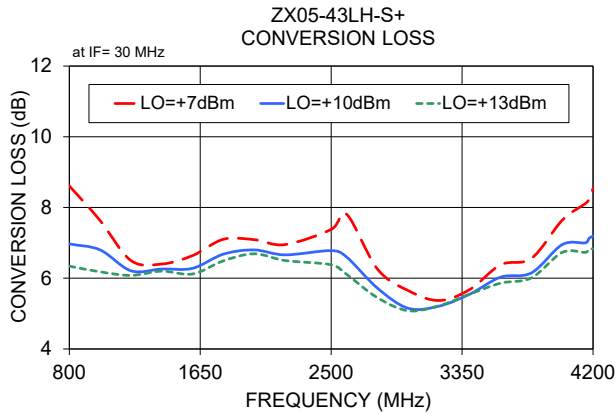
Notes

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Performance Charts

ZX05-43LH-S+



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