

Frequency Mixer WIDE BAND

ZX05-43H+

Level 17 (LO Power +17 dBm) 1000 to 4000 MHz



Maximum Ratings

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

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

Coaxial Connections

LO	2
RF	3
IF	1

Features

- wide bandwidth, 1000 to 4000 MHz, useable down to 800 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

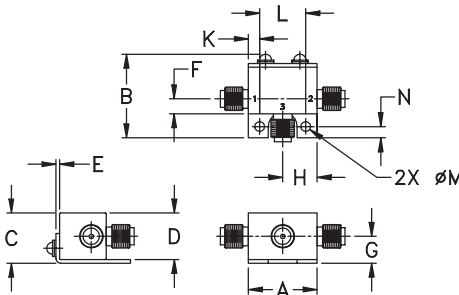
- cellular
- defense and weather radar
- defense communications
- PCN
- WCDMA
- WIFI
- blue tooth
- VSAT
- ISM

CASE STYLE: FL905

Connectors	Model
SMA	ZX05-43H-S+

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

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

Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS* (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)	
		Typ.	Min.	Typ.	Min.		
LO/RF f _L -f _U	IF	Typ.	σ	Max.	Typ.	Min.	Typ.
1000-4000	DC-1500						
1000-2500		6.5	0.1	9.3	37	32	22
2500-4000		6.0	0.1	9.6	31	25	22

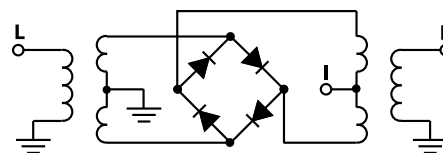
1 dB COMPR.: +14 dBm typ.

* 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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
1000.10	1030.10	7.95	37.91	24.63	2.64	1.90
1200.10	1230.10	6.57	43.66	28.59	3.37	1.42
1400.10	1430.10	6.28	38.32	31.65	3.61	2.05
1600.10	1630.10	6.57	36.58	25.15	3.63	2.17
1800.10	1830.10	6.89	37.44	17.66	3.90	1.85
2000.10	2030.10	7.00	36.67	10.13	3.84	1.26
2200.10	2230.10	6.97	39.95	9.74	3.90	1.50
2400.10	2430.10	6.36	37.84	12.34	2.96	2.34
2500.10	2530.10	7.89	42.17	13.94	3.97	2.62
2600.10	2630.10	8.97	38.42	15.44	4.32	2.72
2700.10	2730.10	7.12	37.70	16.93	3.29	2.70
2800.10	2830.10	6.62	35.31	18.55	2.39	2.73
2900.10	2930.10	5.86	39.36	20.26	1.80	2.86
3000.10	3030.10	5.50	35.81	23.07	1.35	2.91
3100.10	3130.10	5.24	32.82	25.94	1.19	2.57
3200.10	3230.10	5.25	31.48	27.83	1.19	2.19
3400.10	3430.10	5.69	30.99	23.88	1.28	1.61
3600.10	3630.10	6.16	27.70	21.27	1.92	1.67
3800.10	3830.10	6.60	27.93	18.12	2.65	2.30
4000.10	4030.10	7.95	29.47	19.70	3.90	3.89

Electrical Schematic

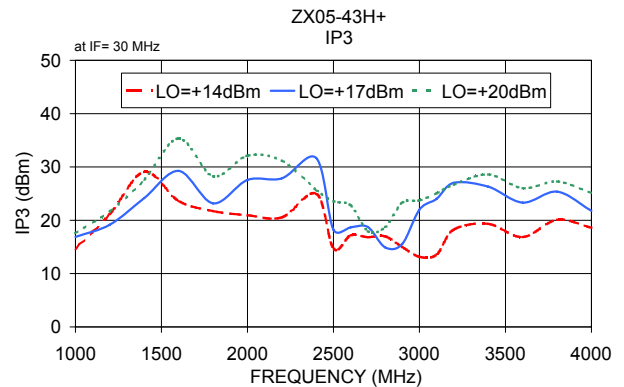
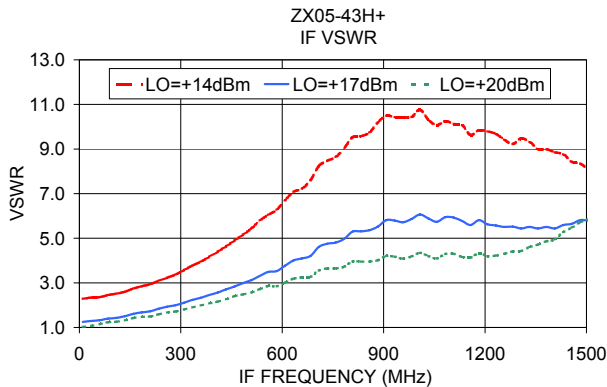
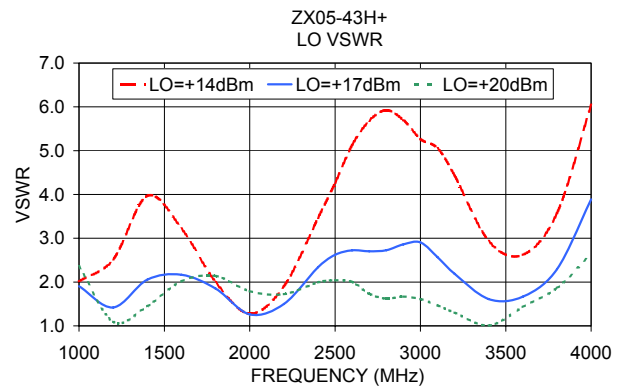
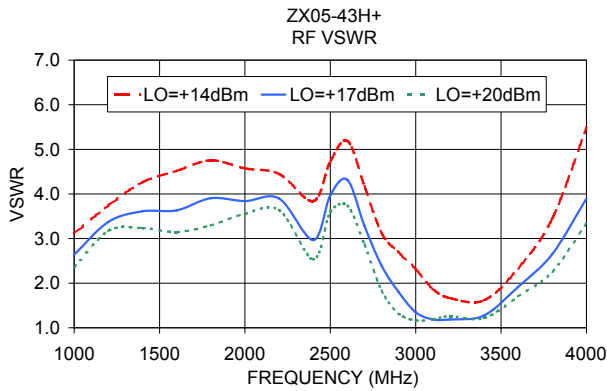
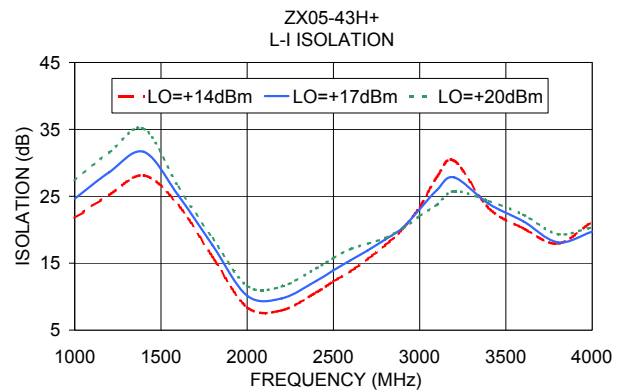
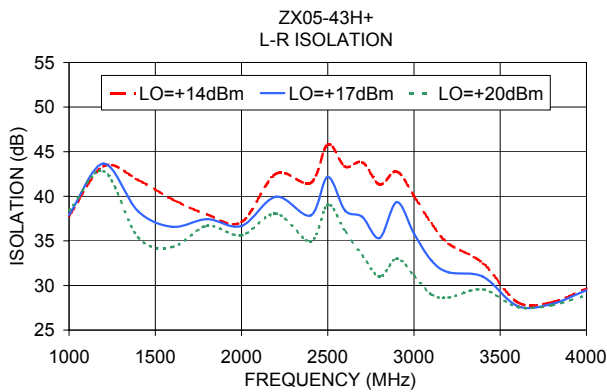
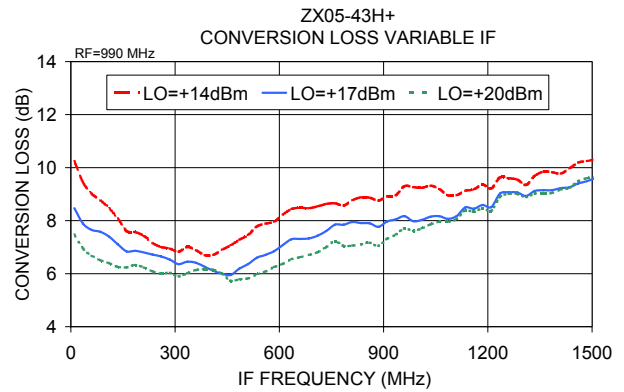
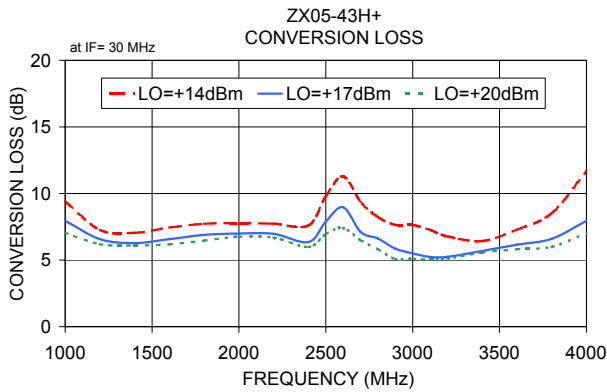


Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

REV. A
M151107
ZX05-43H+
ED-12902/12
DJ/TD/QL
151009





Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

