

# Frequency Mixer WIDE BAND

## ZX05-43LH+

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



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-43LH-S+	\$46.45	(1-24)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

The +Suffix has been added in order to identify 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

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

### Coaxial Connections

LO	2
RF	3
IF	1

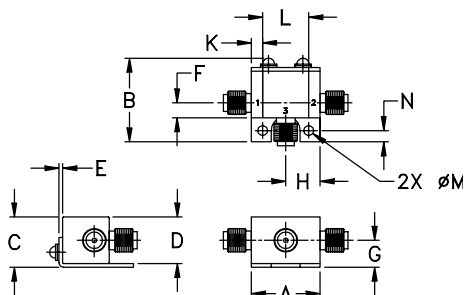
### Features

- 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

### 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 (dBm)
		Typ.	Min.	Typ.	Min.	
824-4200	DC-1500					
824-2500		6.3	0.1	35	28	15
2500-4200		5.7	0.1	28	23	14

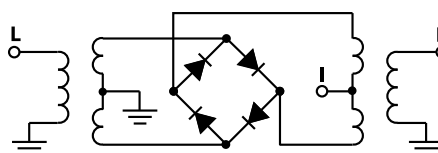
1 dB COMPR.: +5 dBm typ.

\* Conversion loss at 30 MHz IF.  $\sigma$  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)	
					LO +10dBm	LO +10dBm
800.10	830.10	6.97	40.28	2.20	8.01	
1000.10	1030.10	6.80	40.62	2.24	2.48	
1200.10	1230.10	6.21	37.61	3.04	1.16	
1400.10	1430.10	6.26	33.28	34.87	3.09	
1600.10	1630.10	6.28	31.73	26.86	3.01	
1800.10	1830.10	6.68	34.95	19.25	3.22	
2000.10	2030.10	6.80	34.01	12.32	3.50	
2200.10	2230.10	6.66	35.08	12.21	3.40	
2500.10	2530.10	6.78	34.96	15.85	3.10	
2600.10	2630.10	6.60	32.68	17.18	2.99	
2800.10	2830.10	5.72	28.25	19.07	1.83	
3000.10	3030.10	5.15	29.65	21.70	1.15	
3200.10	3230.10	5.21	27.31	26.03	1.33	
3400.10	3430.10	5.55	28.46	24.94	1.28	
3600.10	3630.10	6.03	26.81	21.60	1.83	
3800.10	3830.10	6.15	26.88	18.70	2.24	
4000.10	4030.10	6.95	28.58	19.35	3.12	
4150.10	4180.10	7.00	28.86	16.90	2.90	
4175.10	4205.10	7.13	28.88	17.17	2.99	
4200.10	4230.10	7.19	28.80	16.66	3.16	

### Electrical Schematic



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

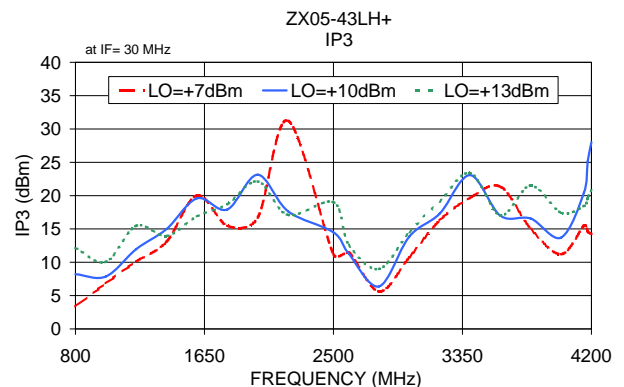
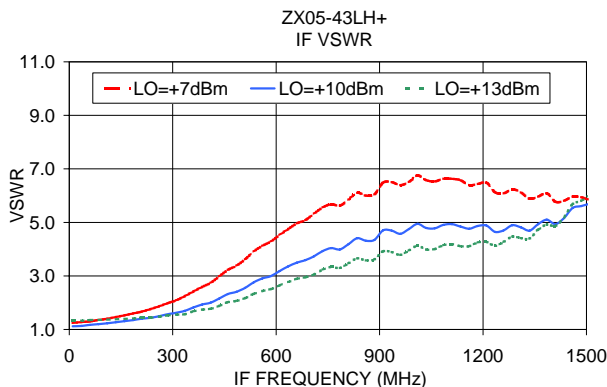
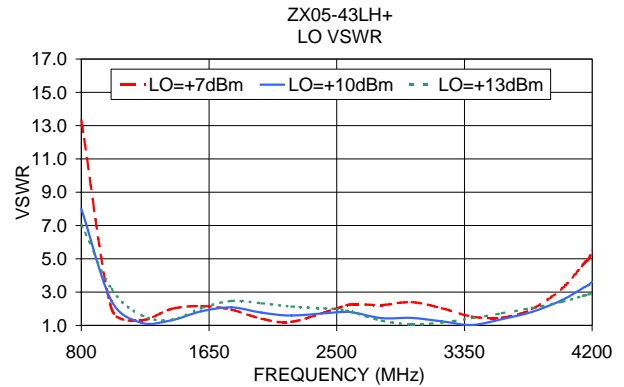
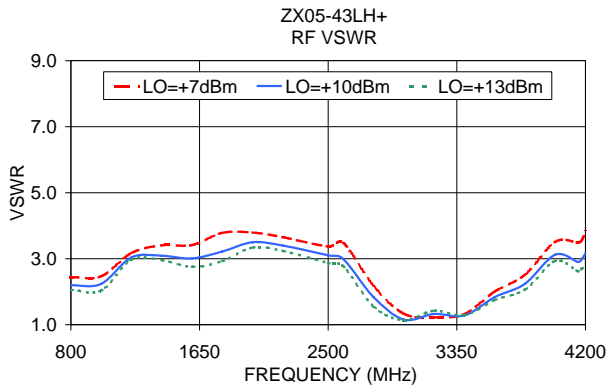
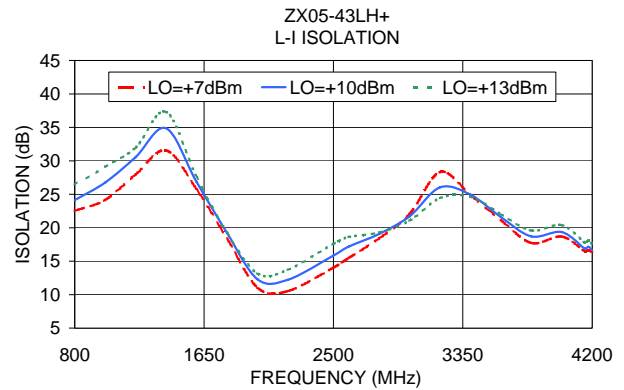
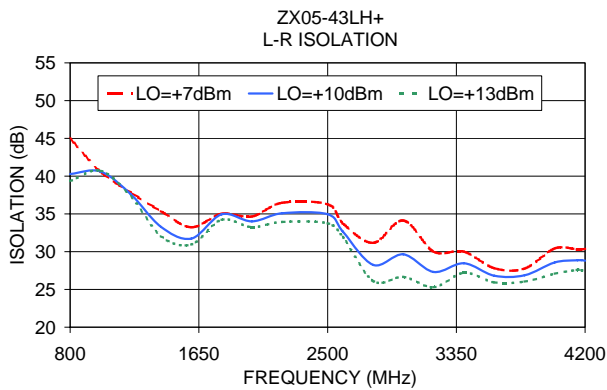
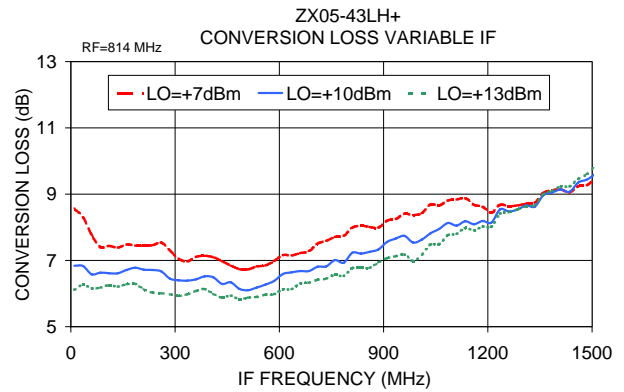
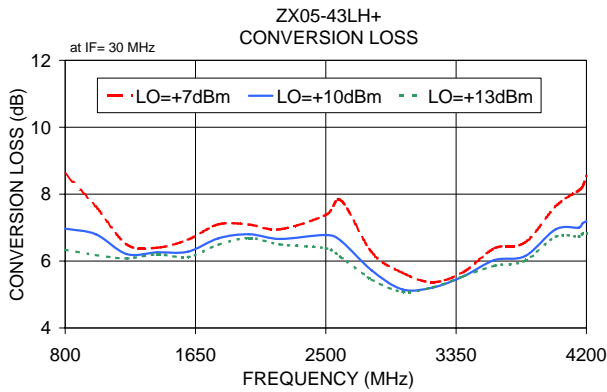
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

REV. OR  
M111660  
ZX05-43LH+  
ED-12902/13  
DJ/TD/QL  
091007  
Page 1 of 2



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 *The Design Engineers Search Engine* Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).