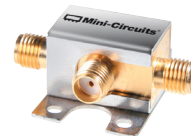


# Frequency Mixer WIDE BAND

## ZX05-43MH-S+

### Level 13 (LO Power +13 dBm) 824 to 4200 MHz



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-43MH-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
Permanent damage may occur if any of these limits are exceeded.	

### Coaxial Connections

LO	2
RF	3
IF	1

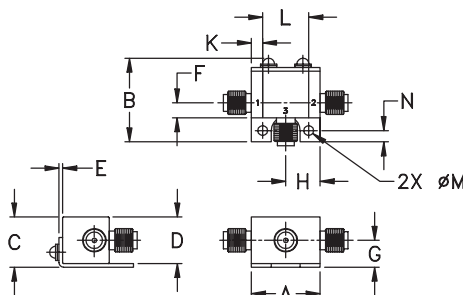
### Features

- 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 at center band (dBm)
		Typ.	Min.	Typ.	Min.	
824-4200	DC-1500					
824-2500		6.3	0.1	37	28	20
2500-4200		5.7	0.1	30	22	22

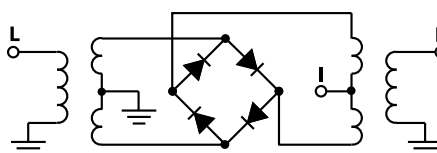
1 dB COMPR.: +9 dBm typ.

\* 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 +13dBm	LO +13dBm
810.00	840.00	7.06	38.11	2.08	8.55	
1010.00	1040.00	6.43	43.16	2.83	2.44	
1210.00	1240.00	5.83	41.09	3.45	1.27	
1410.00	1440.00	5.82	34.44	3.53	1.16	
1610.00	1640.00	5.70	33.13	3.12	1.61	
1810.00	1840.00	6.00	35.10	3.21	1.77	
2010.00	2040.00	5.93	33.76	3.28	1.62	
2210.00	2240.00	5.94	34.33	3.33	1.85	
2410.00	2440.00	5.12	31.89	2.18	2.27	
2610.00	2640.00	5.44	31.05	2.43	2.37	
2810.00	2840.00	5.15	29.56	1.88	1.72	
3010.00	3040.00	4.63	27.17	1.70	1.64	
3210.00	3240.00	4.96	25.87	1.92	1.37	
3410.00	3440.00	5.46	25.97	2.11	1.34	
3610.00	3640.00	6.47	24.80	3.34	1.88	
3810.00	3840.00	6.88	25.65	3.76	2.58	
4010.00	4040.00	7.75	26.66	5.03	3.83	
4110.00	4140.00	7.74	26.80	5.14	4.62	
4150.00	4180.00	7.92	26.85	5.44	4.84	
4210.00	4240.00	7.83	26.88	5.07	5.28	

### Electrical Schematic



### Notes

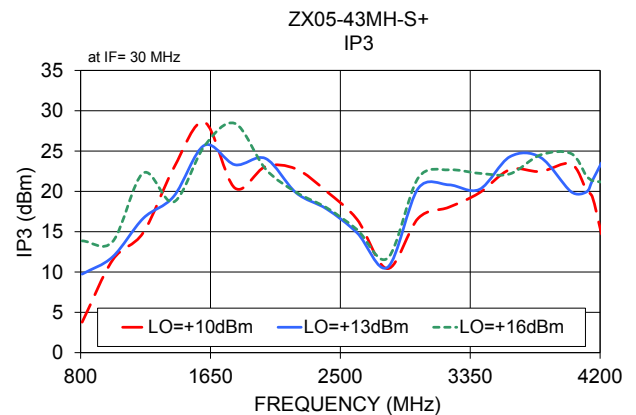
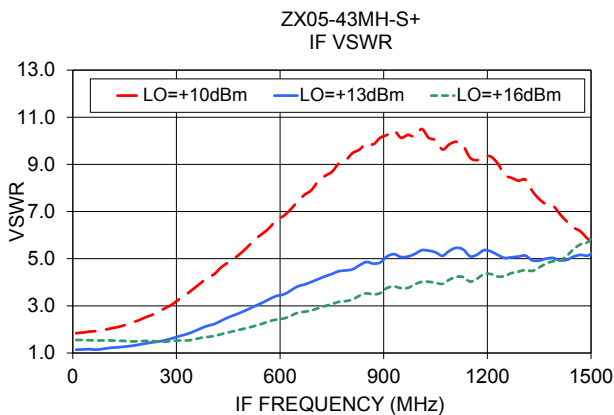
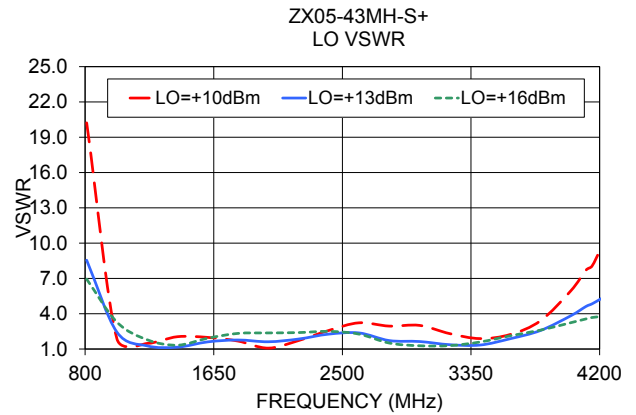
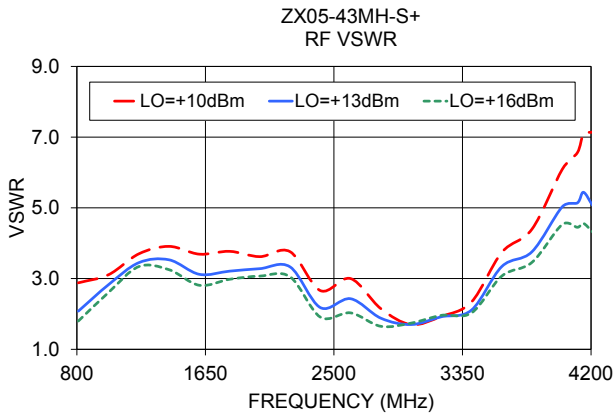
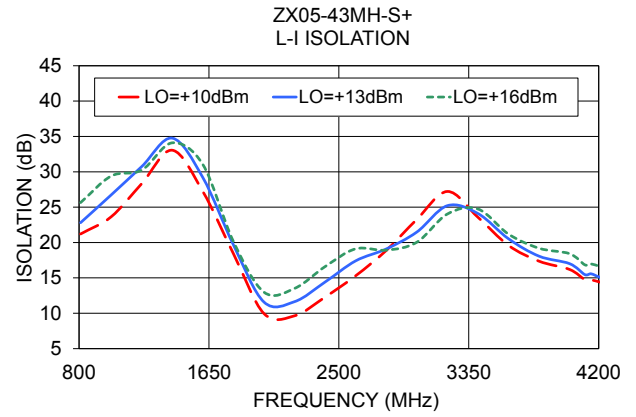
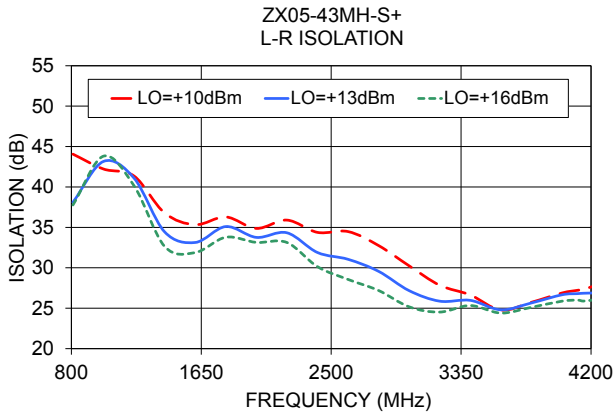
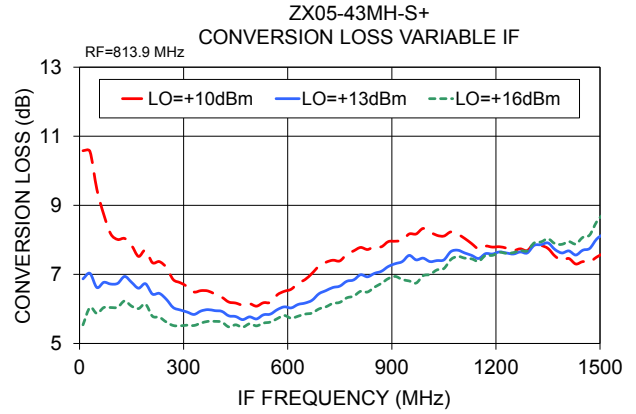
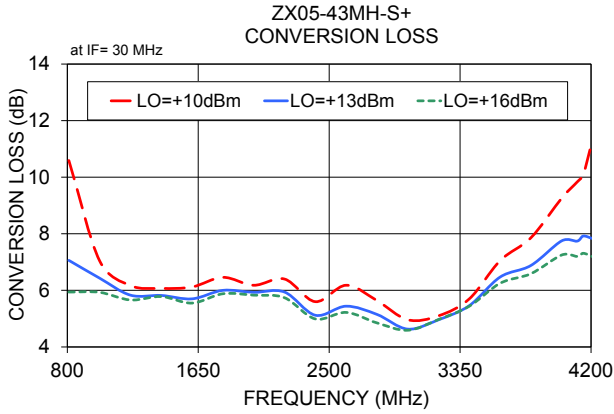
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# Performance Charts

# ZX05-43MH-S+



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