

# Coaxial Frequency Mixer

## ZX05-10H+

Level 17 (LO Power +17 dBm) 10 to 1000 MHz



### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

### 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 & 6,947,717

### Applications

- cellular
- PCS
- instrumentation
- satellite communication

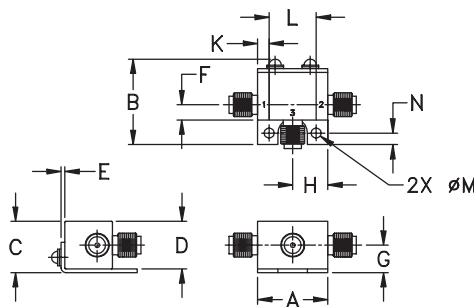
CASE STYLE: FL905

Connectors	Model
SMA	ZX05-10H-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 (T<sub>AMB</sub>=25°C)

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3 at center band (dBm)			
		L	M	U	L	M	U				
10-1000	DC-800	68	52	47	25	46	30	20	26	13	22

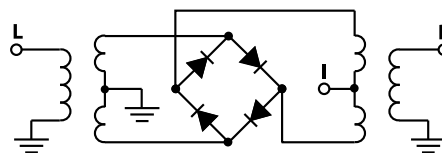
1 dB COMP.: +14 dBm typ.  
Conversion Loss increases when IF is above 150 MHz.

L = low range [f<sub>1</sub> to 10 f<sub>1</sub>]  
M = mid range [10 f<sub>1</sub> to f<sub>1</sub>/2]  
U = upper range [f<sub>1</sub>/2 to f<sub>1</sub>]

### 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
10.10	40.10	7.55	81.69	62.06	1.43	1.13
50.10	80.10	7.39	69.91	47.32	1.39	1.09
100.10	70.10	7.47	64.18	40.85	1.40	1.13
143.85	113.85	7.39	61.39	37.09	1.39	1.18
215.10	185.10	7.24	56.02	32.50	1.38	1.20
262.60	232.60	7.10	54.66	30.65	1.38	1.19
310.10	280.10	7.07	53.72	29.51	1.40	1.20
357.60	327.60	7.02	53.34	28.60	1.39	1.17
405.10	375.10	7.15	51.82	28.24	1.40	1.20
452.60	422.60	7.04	50.25	27.84	1.39	1.18
500.10	470.10	7.24	48.94	27.66	1.41	1.24
552.10	522.10	7.17	46.94	27.44	1.39	1.23
616.10	586.10	7.30	45.19	27.21	1.38	1.30
648.10	618.10	7.31	44.07	27.04	1.38	1.32
712.10	682.10	7.39	42.17	25.98	1.35	1.34
776.10	746.10	7.14	39.71	24.50	1.32	1.45
840.10	810.10	7.25	36.65	23.70	1.28	1.53
904.10	874.10	7.47	34.81	23.29	1.26	1.56
968.10	938.10	7.65	33.06	22.47	1.23	1.69
1000.10	970.10	7.67	32.44	21.87	1.23	1.70

### Electrical Schematic

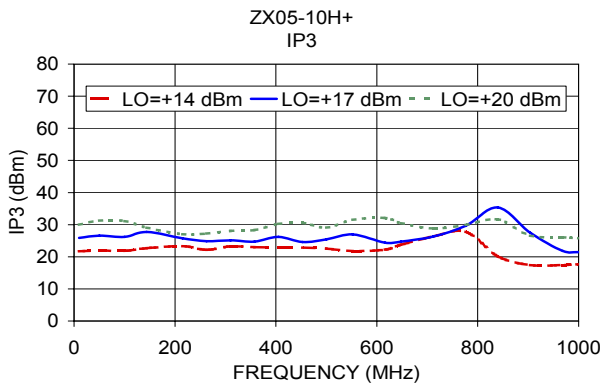
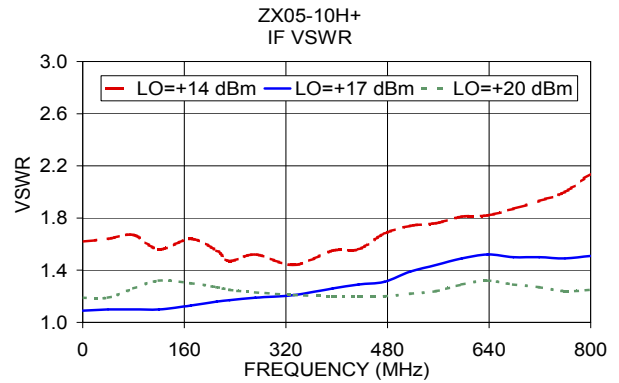
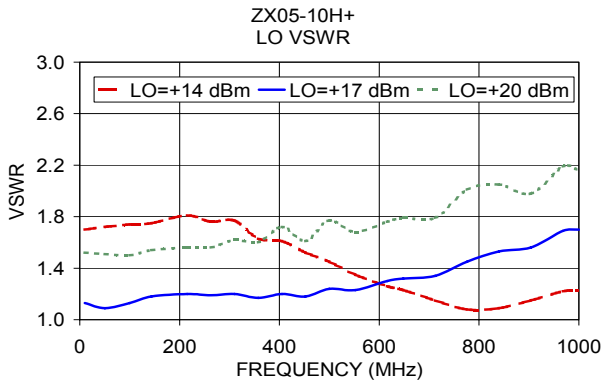
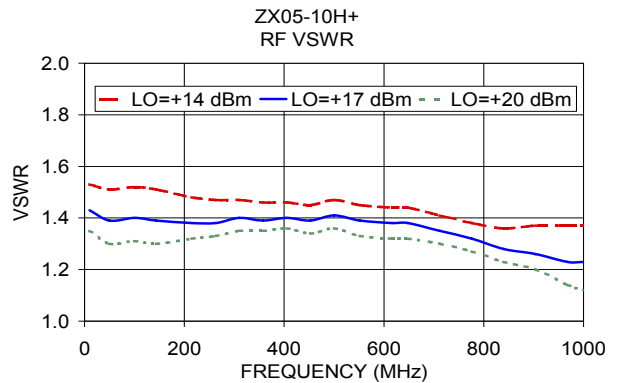
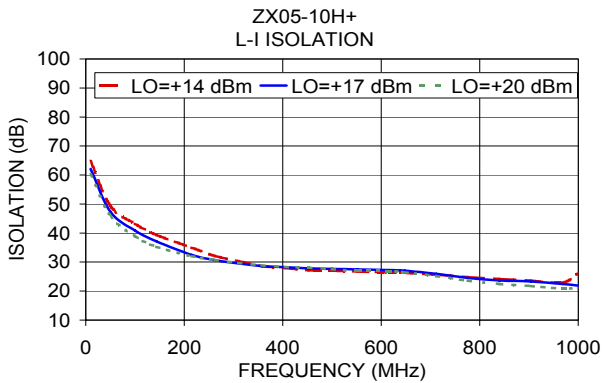
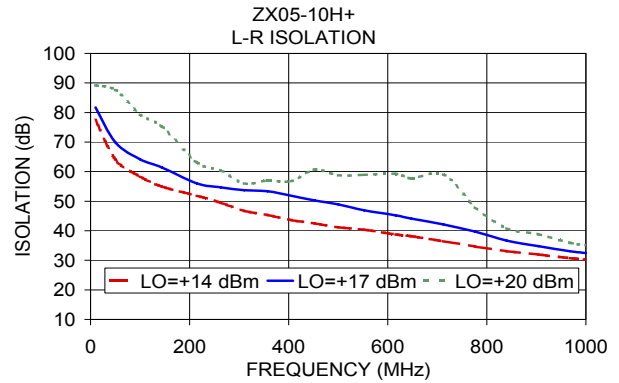
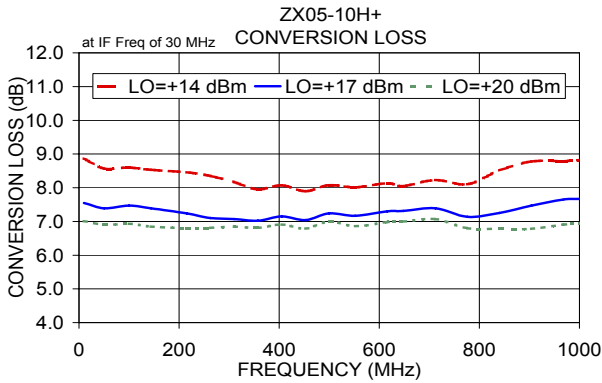


### Notes

- 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.
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