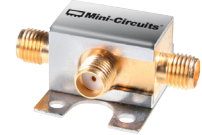


# Coaxial Frequency Mixer

## ZX05-17H+ ZX05-17H

Level 17 (LO Power +17 dBm) 100 to 1700 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

### Applications

- cellular
- PCS
- instrumentation
- satellite communication

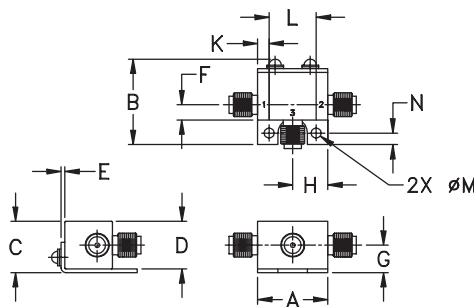
CASE STYLE: FL905

Connectors	Model
SMA	ZX05-17H-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)
	LO/RF	IF	Mid-Band m	Total Range Max.	L	U	L	U	L	U	L	U	
100-1700	50-1500	$f_L-f_U$	$\bar{X}$	$\sigma$	Max.	9.5	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
							32	20	36	22	32	20	37
													25

1 dB COMP.: +14 dBm typ.

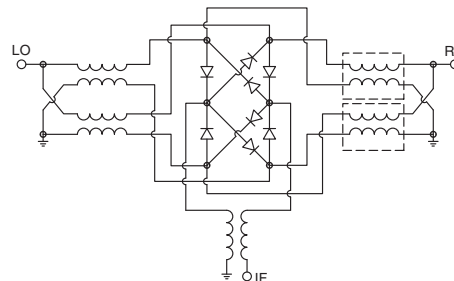
L = 100 - 850 MHz  
m = mid band [ $2f_L$  to  $f_U/2$ ]

U = upper range [ $f_U/2$  to  $f_U$ ]

### 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
100.10	130.11	7.96	29.37	29.75	1.48	1.71
179.05	209.06	7.83	30.72	31.15	1.37	1.64
258.00	288.01	7.74	31.94	32.85	1.30	1.64
336.94	366.95	7.65	33.24	34.50	1.30	1.65
455.36	485.37	7.57	33.98	36.15	1.33	1.61
573.78	603.79	7.72	34.72	38.47	1.41	1.64
652.73	682.74	7.66	34.93	39.68	1.44	1.60
731.68	761.69	7.68	34.37	40.44	1.46	1.62
810.63	840.64	7.79	34.47	41.10	1.48	1.70
900.10	930.11	7.77	34.41	42.20	1.47	1.72
984.31	1014.32	7.68	34.35	43.77	1.45	1.82
1068.52	1098.53	7.75	32.18	39.71	1.46	1.91
1152.73	1182.74	7.90	30.24	38.47	1.46	2.06
1236.94	1266.95	7.89	30.45	39.51	1.46	2.11
1321.15	1351.16	7.82	30.76	41.10	1.49	2.13
1405.36	1435.37	7.78	31.39	43.13	1.52	2.16
1489.57	1519.58	7.78	30.65	46.17	1.53	2.12
1573.78	1603.79	7.95	29.38	54.03	1.55	2.08
1658.00	1688.01	8.00	29.37	53.22	1.55	2.09
1700.10	1670.09	8.08	29.74	47.47	1.37	2.21

### Electrical Schematic

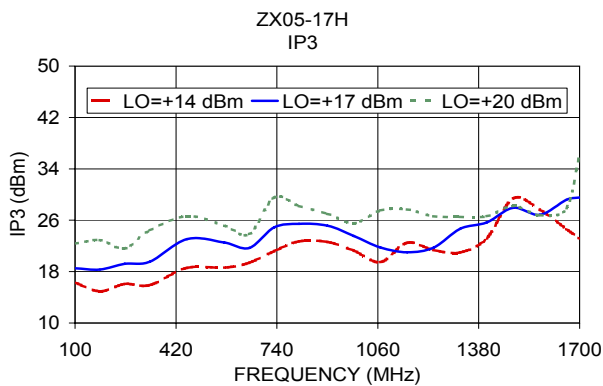
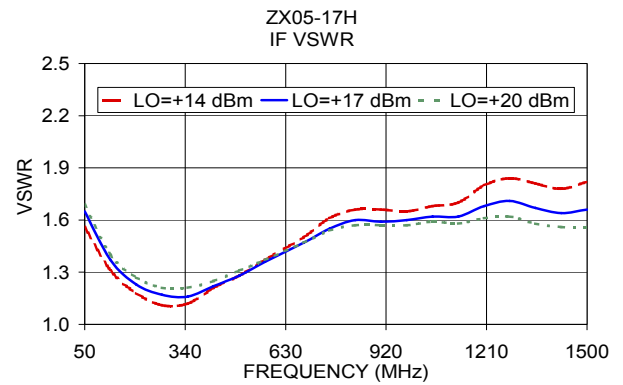
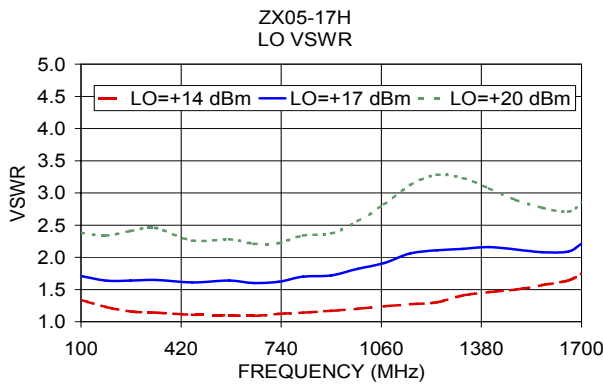
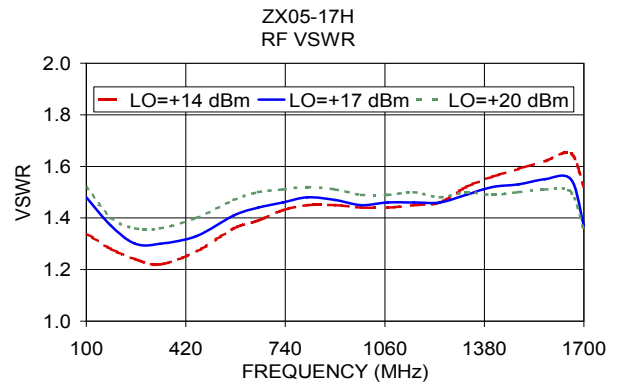
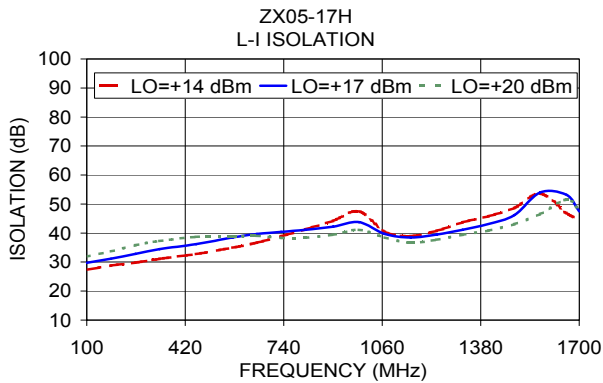
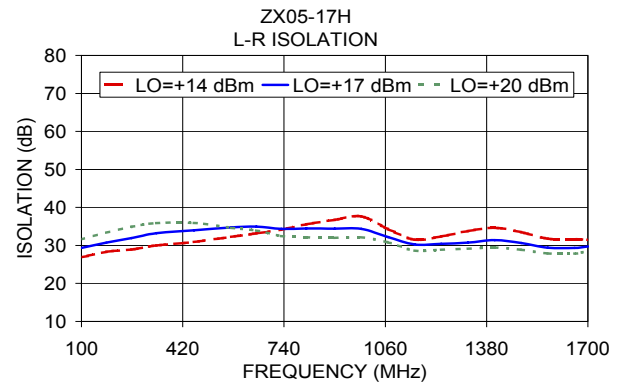
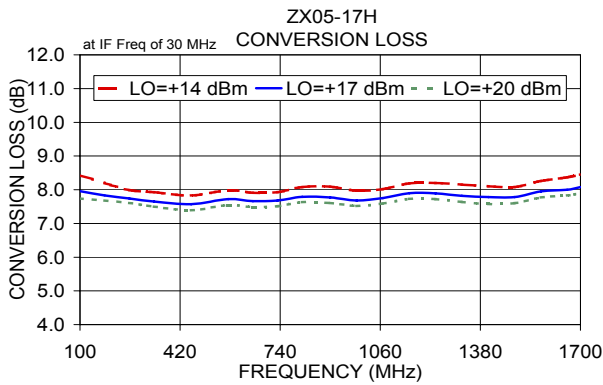


### Notes

- 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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## Performance Charts



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