

Frequency Mixer

ZX05-17H-S+

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

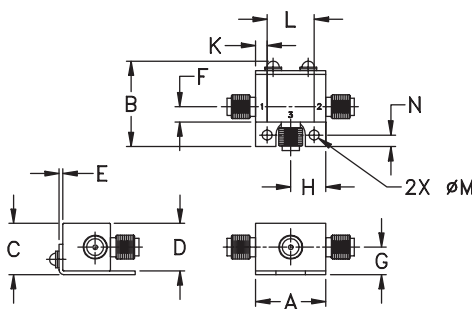
Maximum Ratings

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

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

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

Electrical Specifications (T_{AMB}=25°C)

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)				LO-IF ISOLATION (dB)				IP3 at center band (dBm)
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.	L		U		L		U			
		$\overline{X}$	σ		Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
100-1700	50-1500	7.2	0.1	8.5	9.5	32	20	36	22	32	20	37	22	25

1 dB COMP.: +14 dBm typ.

L = 100 - 850 MHz

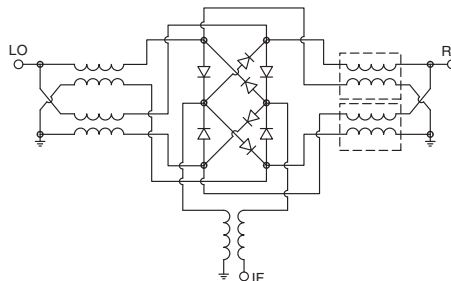
m= mid band [2f_L to f_U/2]

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

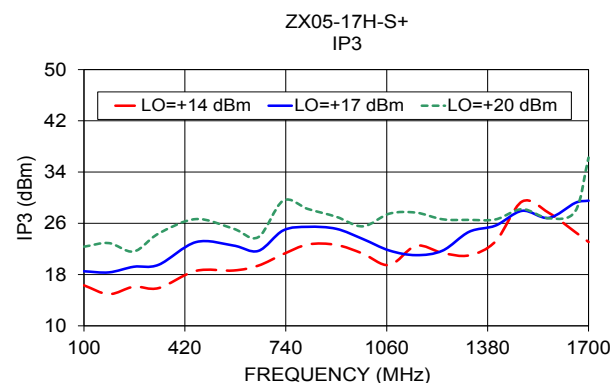
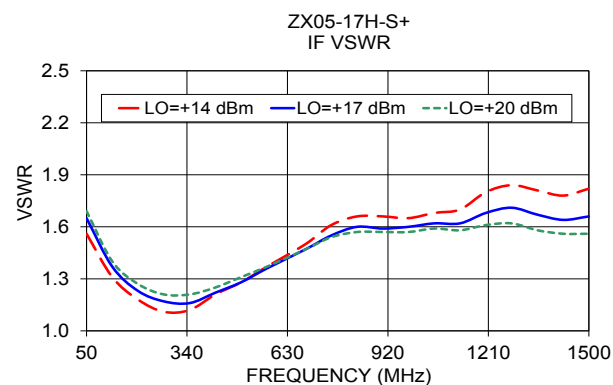
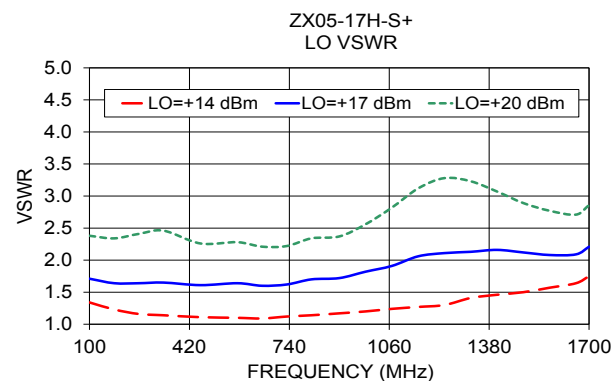
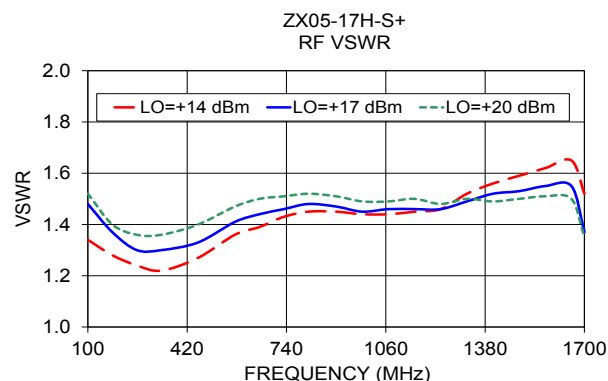
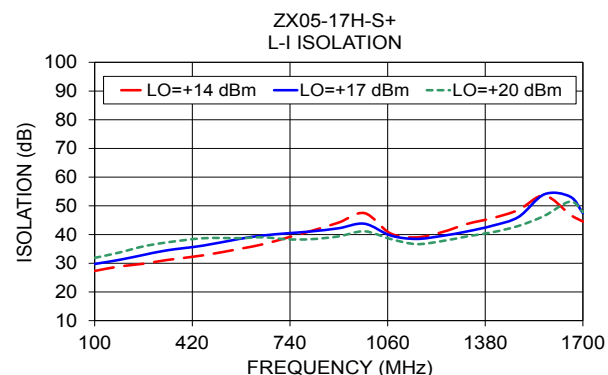
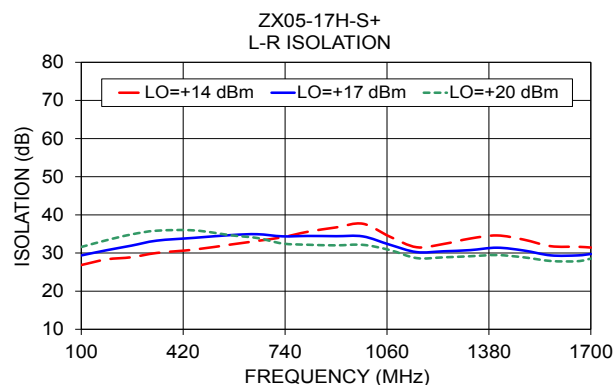
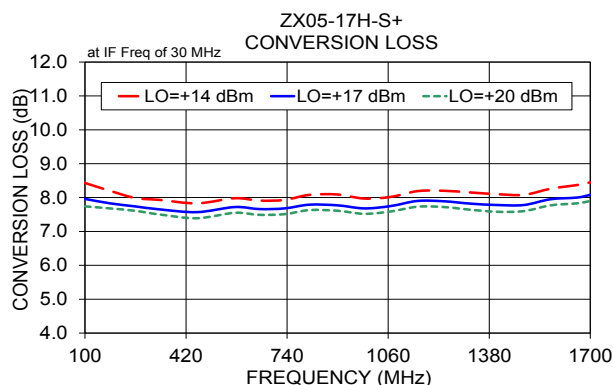
Electrical Schematic



Notes

- 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.
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