

Frequency Mixer

ZX05-17H

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

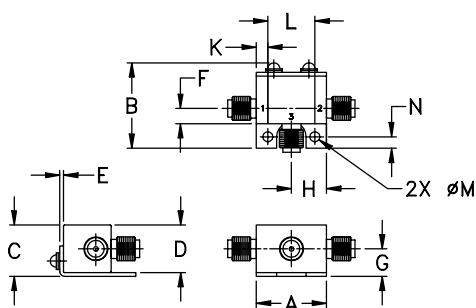
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

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

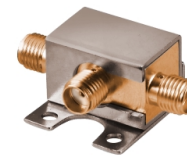
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

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	Price	Qty.
SMA	ZX05-17H-S	\$41.95 ea.	(1-24)

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		Total Range Max.	Max.	L		U	Typ.	L		U	Typ.	
		\overline{X}	σ			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 [$f_L/2$ to f_U]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

