

# Coaxial Frequency Mixer

## ZX05-20H+ ZX05-20H

Level 17 (LO Power +17 dBm) 1500 to 2000 MHz



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-20H-S(+)	\$41.95 ea.	(1-24)

### 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

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

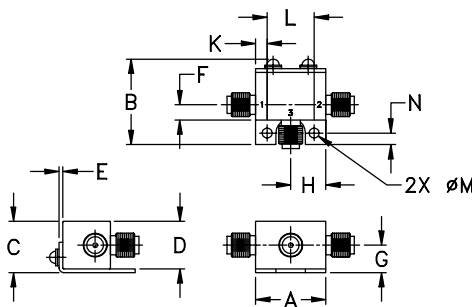
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### 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 f <sub>L</sub> -f <sub>U</sub>	$\bar{X}$ Max.	Typ. Min.	Typ. Min.	Typ.
1500-2000 DC-300	5.2 0.2 7.8	31 22	34 20	22

1 dB COMP.: +14 dBm typ.

### Outline Drawing



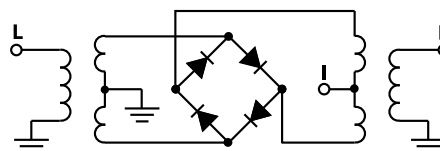
### Outline Dimensions (inch/mm)

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

### 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
1500.10	1530.10	5.41	29.73	34.08	1.20	2.52
1525.74	1555.74	5.42	29.61	35.32	1.15	2.53
1551.38	1521.38	5.45	29.87	36.63	1.14	2.26
1577.02	1547.02	5.43	30.16	38.26	1.10	2.36
1602.66	1572.66	5.34	30.24	39.88	1.08	2.50
1628.31	1598.31	5.33	30.53	40.20	1.06	2.17
1653.95	1623.95	5.39	31.16	40.57	1.05	2.07
1679.59	1649.59	5.34	31.64	40.80	1.07	2.29
1705.23	1675.23	5.34	31.67	40.68	1.09	2.24
1730.87	1700.87	5.30	32.00	39.89	1.11	2.02
1756.51	1726.51	5.31	32.45	39.41	1.13	2.07
1794.97	1764.97	5.27	33.02	39.14	1.15	2.12
1820.61	1790.61	5.27	33.08	39.21	1.15	1.86
1846.25	1816.25	5.30	32.43	38.69	1.16	1.91
1871.90	1841.90	5.30	31.30	37.77	1.18	1.97
1897.54	1867.54	5.27	30.34	36.83	1.20	1.87
1923.18	1893.18	5.35	29.97	36.56	1.21	1.80
1948.82	1918.82	5.39	29.89	36.36	1.22	1.89
1974.46	1944.46	5.38	29.89	35.83	1.23	1.84
2000.10	1970.10	5.32	30.01	35.31	1.24	1.79

### Electrical Schematic



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

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## Performance Charts

