

Coaxial Frequency Mixer

ZX05-1L+

Level 3 (LO Power +3 dBm) 2 to 500 MHz



Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
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

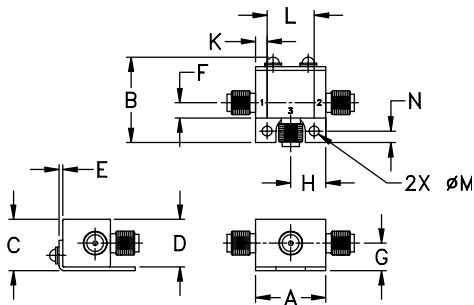
CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-1L-S+	\$37.95 ea.	(1-24)

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

The +Suffix has been added in order to identify 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_{AMB}=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				
2-500	DC-500	68	50	30	55	40	45	30	35	25	16

1 dB COMP.: 0 dBm typ.

L = low range [f_L to 10 f_L]

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

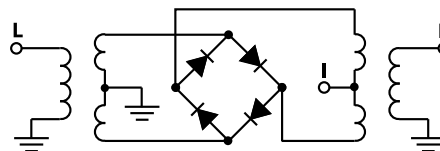
M = mid range [10 f_L to f_L/2]

U = upper range [f_L/2 to f_L]

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 +3dBm	LO +3dBm	LO +3dBm	LO +3dBm	LO +3dBm
2.10	32.10	6.13	73.59	76.66	1.27	1.63
20.10	50.10	5.57	69.92	58.59	1.14	1.54
50.10	80.10	5.64	63.85	50.98	1.13	1.54
70.10	40.10	5.66	60.54	48.03	1.13	1.52
94.10	64.10	5.70	57.76	45.29	1.13	1.52
106.10	76.10	5.68	56.42	44.32	1.12	1.52
142.10	112.10	5.64	53.59	41.90	1.12	1.52
166.10	136.10	5.66	52.14	40.76	1.12	1.54
190.10	160.10	5.62	50.86	39.83	1.12	1.55
214.10	184.10	5.61	49.33	38.88	1.11	1.57
238.10	208.10	5.61	48.62	37.96	1.12	1.59
270.10	240.10	5.67	47.30	37.31	1.13	1.61
300.77	270.77	5.68	45.64	36.86	1.14	1.64
331.43	301.43	5.72	44.35	36.25	1.15	1.67
362.10	332.10	5.71	43.39	35.39	1.17	1.68
392.77	362.77	5.79	44.69	34.15	1.19	1.75
423.43	393.43	5.77	44.08	33.62	1.22	1.79
454.10	424.10	5.84	44.03	32.86	1.23	1.77
484.77	454.77	5.90	43.22	31.69	1.24	1.83
500.10	470.10	5.95	42.81	31.23	1.24	1.85

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp.

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