

Coaxial Frequency Mixer

ZX05-10L+

Level 4 (LO Power +4 dBm) 10 to 1000 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 & 6,947,717

Applications

- cellular
- PCS
- instrumentation
- satellite communication



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-10L-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.

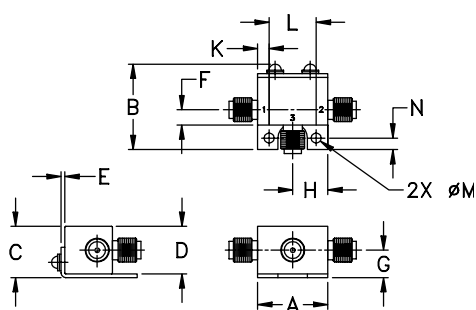
Electrical Specifications (T_{AMB}=25°C)

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						IP3 at center band (dBm)
LO/RF	IF	Mid-Band		Total Range Max.		L		M		U		L		M		U		
		$\overline{X}$	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
10-1000	DC-800	7.2	0.1	8.2	8.8	70	55	60	40	47	37	40	26	37	20	24	13	

1 dB COMP.: +1 dBm typ.
Conversion Loss increases when IF is above 150 MHz.

L = low range [f_L to $10 f_L$]
M = mid range [$10 f_L$ to $f_U/2$]
U = upper range [$f_U/2$ to f_U]
m= mid band [$2 f_L$ to $f_U/2$]

Outline Drawing



Outline Dimensions (inch/mm)

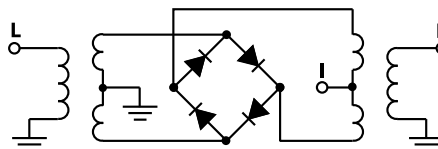
A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37

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 +4dBm	LO +4dBm	LO +4dBm	LO +4dBm	LO +4dBm
10.10	40.10	7.11	73.60	61.44	1.50	1.25
50.10	80.10	6.95	64.82	48.24	1.48	1.20
100.10	70.10	7.02	60.58	42.69	1.47	1.19
143.85	113.85	6.98	58.32	40.57	1.45	1.19
191.35	161.35	6.97	56.93	39.20	1.44	1.18
262.60	232.60	6.82	55.91	37.54	1.41	1.20
310.10	280.10	6.80	55.22	36.17	1.39	1.24
357.60	327.60	6.75	54.50	34.01	1.39	1.25
405.10	375.10	6.78	53.05	31.84	1.38	1.27
452.60	422.60	6.74	51.42	30.10	1.37	1.32
500.10	470.10	6.82	49.97	27.89	1.38	1.37
552.10	522.10	6.72	51.89	26.26	1.34	1.36
616.10	586.10	6.76	66.73	24.80	1.30	1.44
648.10	618.10	6.72	57.27	24.21	1.29	1.48
712.10	682.10	6.89	47.16	23.25	1.33	1.52
776.10	746.10	7.00	47.22	22.14	1.38	1.57
840.10	810.10	7.13	50.02	20.82	1.42	1.57
904.10	874.10	7.10	58.49	19.62	1.46	1.49
968.10	938.10	6.57	57.19	18.18	1.42	1.51
1000.10	970.10	6.41	49.70	17.55	1.41	1.54

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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

IF/RF MICROWAVE COMPONENTS

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