

Frequency Mixer WIDE BAND

ZX05-153+

Level 7 (LO Power +7 dBm) 3400 to 15000 MHz



Maximum Ratings

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

Coaxial Connections

LO	2
RF	3
IF	1

Features

- wide bandwidth, 3400 to 15000 MHz
- low conversion loss, 6.8 dB typ.
- high L-R isolation, 36 dB typ.
- excellent IF BW, DC to 4000 MHz
- rugged construction
- small size
- useable as up and down converter
- protected by US patents, 6,790,049 and 7,027,795

Applications

- satellite up and down converters
- defense radar and communications
- line of sight links
- federal fixed service
- WIFI
- blue tooth
- VSAT
- ISM

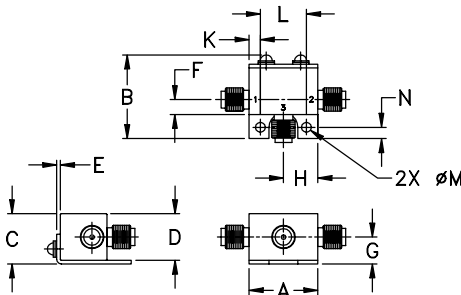
CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-153-S+	\$48.95	(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

FREQUENCY (MHz)	CONVERSION LOSS* (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)			
		Typ.	Min.	Typ.	Min.				
LO/RF $f_c - f_u$	IF	Typ.	σ	Max.	Typ.	Min.	Typ.		
3400-15000	DC-4000								
3400-10000		6.5	0.3	9.9	36	25	15	9	11
10000-13500		11.0	0.7	13.5	35	20	30	14	13
13500-15000		8.0	0.4	10.4	28	16	25	11	10

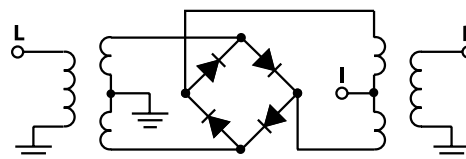
1 dB COMPR.: +1 dBm typ.

* Conversion loss at 30 MHz IF. σ is a measure of repeatability from unit to unit.

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)	
					LO +7dBm	LO +7dBm
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
3389.10	3419.10	7.73	53.72	19.87	2.92	19.76
4009.10	4039.10	6.26	42.23	19.60	2.93	7.70
4598.10	4628.10	5.95	39.41	15.55	2.35	4.74
5218.10	5248.10	6.49	37.60	13.58	3.34	2.49
5807.10	5837.10	6.37	36.28	14.94	3.21	1.48
6427.10	6457.10	6.16	37.57	16.85	2.78	2.17
7016.10	7046.10	6.01	38.42	17.33	2.13	3.44
7605.10	7635.10	5.89	37.05	14.68	1.68	4.09
8194.10	8224.10	5.93	33.03	14.75	1.99	3.95
8814.10	8844.10	6.35	37.00	22.36	3.22	3.20
9992.10	10022.10	9.08	30.28	18.43	5.39	1.81
10612.10	10642.10	9.48	36.89	23.48	5.74	1.92
11201.10	11231.10	9.64	38.60	28.40	5.74	2.02
11821.10	11851.10	9.82	35.13	31.35	5.36	2.13
12410.10	12440.10	10.48	35.91	37.37	5.13	2.52
13030.10	13060.10	8.58	26.54	37.69	4.43	4.01
13495.10	13525.10	8.62	24.19	32.08	4.23	6.24
14022.10	14052.10	8.93	27.62	26.87	3.89	8.72
14611.10	14641.10	8.94	32.10	19.38	3.24	10.96
15014.10	15044.10	9.04	22.03	15.17	1.95	8.90

Electrical Schematic



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS

REV. OR
M111660
ZX05-153+
ED-12902/8
DJ/AM
080225
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