

Coaxial Frequency Mixer

ZX05-42MH+

Level 13 (LO Power +13 dBm) 5 to 4200 MHz



CASE STYLE: FL905

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

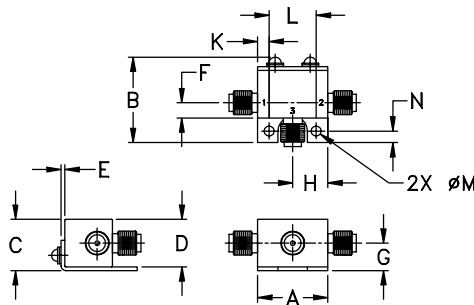
- cellular
- PCS
- instrumentation
- satellite communication

Connectors	Model	Price	Qty.
SMA	ZX05-42MH-S+	\$39.95 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)	
	LO/RF	IF	Mid-Band m	Total Range Max.	L	M	U	L	M	U	L	M	U	L	M	U		
5-4200	5-3500	7.5	0.2	9.8	11.8	47	28	29	20	30	15	34	23	26	17	23	17	19

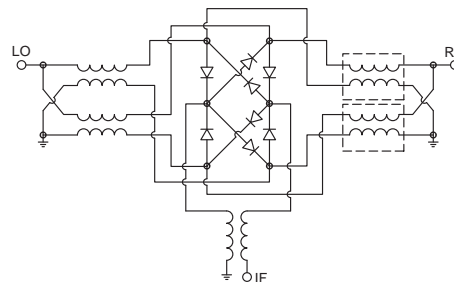
1 dB COMP.: +9 dBm typ.

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]
 \bar{X} = average σ = standard deviation

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
5.10	35.10	7.31	45.95	33.54	1.31	2.39
20.10	50.10	7.13	55.97	35.83	1.21	2.33
100.10	70.10	7.16	55.79	35.64	1.18	2.30
305.66	275.66	7.25	42.66	33.81	1.09	2.24
516.77	486.77	7.39	38.77	31.55	1.18	2.11
727.88	697.88	7.37	37.99	28.97	1.43	1.91
938.99	908.99	7.48	39.66	27.24	1.79	1.79
1150.10	1120.10	7.63	46.71	25.76	2.01	1.65
1361.21	1331.21	7.98	46.26	24.65	2.17	1.53
1572.32	1542.32	8.18	40.21	24.25	2.31	1.45
1783.43	1753.43	8.20	36.57	24.45	2.07	1.35
1994.54	1964.54	8.27	34.51	24.79	1.97	1.34
2200.10	2170.10	8.25	32.76	24.92	1.88	1.36
2485.81	2455.81	8.28	31.48	24.30	1.95	1.35
2771.53	2741.53	8.66	30.19	23.95	1.86	1.35
3057.24	3027.24	8.99	28.98	24.12	1.96	1.27
3342.96	3312.96	9.21	28.90	24.58	1.80	1.11
3628.67	3598.67	9.11	29.94	25.59	1.81	1.14
3914.39	3884.39	9.25	31.33	26.21	1.38	1.25
4200.10	4170.10	9.88	31.78	27.67	1.21	1.39

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 Provides ACTUAL Data Instantly at minicircuits.com

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