

Coaxial Frequency Mixer

ZX05-1MHW+ ZX05-1MHW

Level 13 (LO Power +13 dBm) 0.5 to 600 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

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

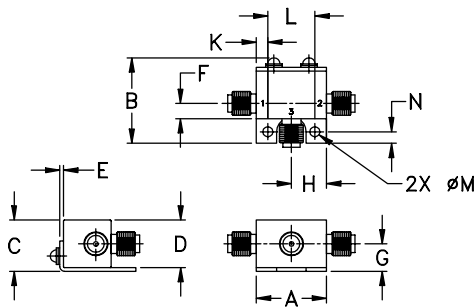
- cellular
- PCS
- instrumentation
- satellite communication

Connectors	Model	Price	Qty.
SMA	ZX05-1MHW-S(+)	\$39.95 ea.	(1-24)

+ 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.

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				
0.5-600	DC-600	\bar{X}	σ	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.		
	f_L-f_U				63	50	53	32	43	20	56	40	44	25	30	20	17

1 dB COMP.: +9 dBm typ.

L = low range [f_L to $10 f_L$]

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

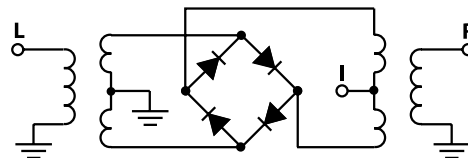
M = mid range [$10 f_L$ to $f_U/2$]

U = upper range [$f_U/2$ to f_U]

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
0.51	30.51	6.90	65.03	59.15	1.94	2.72
35.10	65.10	5.20	57.24	54.53	1.07	2.37
75.10	45.10	5.20	51.59	49.29	1.09	2.32
100.10	70.10	5.21	49.55	46.80	1.10	2.34
136.65	106.65	5.14	47.71	44.52	1.13	2.36
186.31	156.31	5.20	45.43	42.16	1.17	2.37
219.41	189.41	5.21	44.63	41.28	1.20	2.43
252.51	222.51	5.25	43.63	40.19	1.23	2.44
285.62	255.62	5.27	42.50	39.17	1.26	2.44
318.72	288.72	5.26	42.63	38.66	1.28	2.53
351.82	321.82	5.35	41.96	37.65	1.31	2.44
384.93	354.93	5.41	40.38	36.31	1.34	2.52
418.03	388.03	5.39	39.35	34.63	1.39	2.58
451.13	421.13	5.53	37.97	34.45	1.43	2.52
484.24	454.24	5.58	36.94	33.38	1.45	2.63
500.79	470.79	5.58	36.54	33.15	1.45	2.59
533.89	503.89	5.69	35.79	32.80	1.43	2.46
550.45	520.45	5.74	35.31	32.18	1.41	2.49
583.55	553.55	5.74	35.05	30.26	1.38	2.66
600.10	570.10	5.72	35.01	29.30	1.38	2.64

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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Performance Charts

