

# Frequency Mixer

## ZX05-C24MH

Level 13 (LO Power +13 dBm) 300 to 2400 MHz

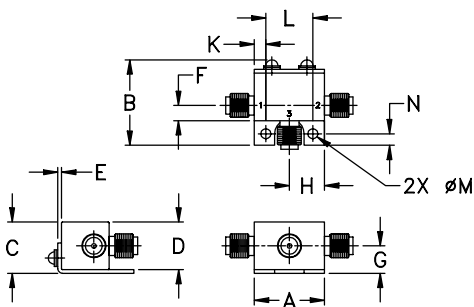
### Maximum Ratings

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

### 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

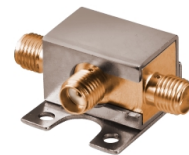
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

### Features

- rugged construction
- small size
- low conversion loss
- high L-R isolation
- protected by US Patents 6,790,049 & 7,027,795

### Applications

- cellular
- PCS
- instrumentation
- satellite communication



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-C24MH-S	\$39.95 ea.	(1-24)

### Electrical Specifications (T<sub>AMB</sub>=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.	Typ.	Min.	Typ.	Min.	Typ.
f <sub>L</sub> -f <sub>U</sub>		$\overline{X}$	$\sigma$						
300-2400	DC-700	6.1	0.1	8.6	40	20	25	14	13

1 dB COMP.: +9 dBm typ.  
m= mid band [2f<sub>L</sub> to f<sub>U</sub>/2]

### 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
300.10	330.10	5.72	49.84	21.77	9.50	19.41
407.79	437.79	5.29	41.51	22.91	10.50	3.41
515.49	545.49	5.99	40.56	25.38	5.31	1.86
623.18	593.18	6.04	54.07	28.08	4.54	1.61
730.87	700.87	5.66	40.08	26.63	5.89	2.12
838.56	808.56	6.11	38.68	29.99	5.11	2.85
1000.10	970.10	6.19	39.74	23.66	5.51	3.17
1107.79	1077.79	6.07	40.41	26.29	6.06	3.77
1215.49	1185.49	6.08	40.14	29.33	5.32	4.06
1323.18	1293.18	6.00	40.23	30.52	6.52	4.23
1430.87	1400.87	5.21	44.53	29.34	9.09	3.66
1538.56	1508.56	5.33	40.37	26.94	12.11	2.04
1700.10	1670.10	5.15	35.10	28.24	12.93	2.18
1807.79	1777.79	5.51	34.07	26.14	10.06	2.20
1915.49	1885.49	5.79	32.41	25.33	8.85	2.69
2023.18	1993.18	6.28	31.06	26.23	6.18	3.00
2130.87	2100.87	7.15	31.11	30.92	5.13	3.00
2238.56	2208.56	6.78	32.24	28.04	5.43	3.18
2346.25	2316.25	6.76	32.56	26.59	6.09	3.84
2400.10	2370.10	6.75	31.57	27.31	6.66	4.15

### Electrical Schematic

