

# Frequency Mixer

## ZX05-C24LH

Level 10 (LO Power +10 dBm) 300 to 2400 MHz

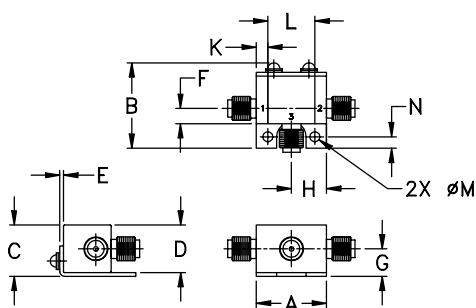
### Maximum Ratings

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

### 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 $f_L$ - $f_U$	IF	Mid-Band m		Total Range Max.	Typ.	Min.	Typ.	Min.	
		$\overline{X}$	$\sigma$						
300-2400	DC-700	6.5	0.1	8.9	40	25	30	15	13

1 dB COMP.: +5 dBm typ.  
m= mid band [ $f_L$  to  $f_U/2$ ]

### 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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
300.10	330.11	5.70	53.04	22.52	2.14	15.23
407.79	437.80	5.14	42.05	23.01	1.71	3.78
515.49	545.50	6.04	39.80	25.36	2.99	1.99
623.18	653.19	5.94	59.61	26.76	3.24	1.72
730.87	760.88	5.61	41.90	25.22	2.83	2.22
838.56	868.57	6.00	40.08	27.63	3.36	2.99
1000.10	1030.11	6.03	41.25	22.89	3.20	3.07
1107.79	1137.80	6.16	41.82	25.12	3.28	3.27
1215.49	1245.50	6.05	42.41	29.02	3.01	3.72
1323.18	1353.19	6.48	42.37	31.66	2.92	3.62
1430.87	1460.88	5.53	41.58	31.62	2.07	2.81
1538.56	1568.57	4.92	39.23	29.26	1.12	1.86
1700.10	1730.11	5.02	34.19	28.15	1.14	1.84
1807.79	1837.80	5.33	35.50	25.13	1.43	1.77
1915.49	1945.50	5.45	33.18	24.10	1.53	2.14
2023.18	2053.19	5.80	32.63	24.63	2.05	2.38
2130.87	2160.88	6.86	33.32	29.00	2.74	2.41
2346.25	2376.26	5.93	36.33	23.52	1.98	3.05
2400.10	2370.09	6.03	34.46	24.94	1.98	3.47

### Electrical Schematic

