

Frequency Mixer

ZX05-10L

Level 4 (LO Power +4 dBm) 10 to 1000 MHz

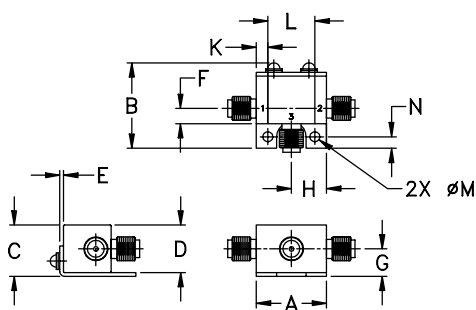
Maximum Ratings

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)

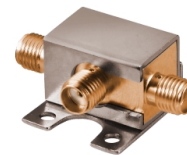
A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

Features

- rugged construction
- small size
- low conversion loss
- high L-R isolation
- protected by US Patents, 6,133,525; 6,790,049 & 6,947,717

Applications

- cellular
- PCS
- instrumentation
- satellite communication



CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-10L-S	\$37.95 ea.	(1-24)

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 f_L - f_U	IF	Mid-Band m		Total Range Max.		L		M		U		L		M		U		
		$\bar{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
10-1000	DC-800	7.2	0.1	8.2	8.8	70	55	60	40	47	37	40	26	37	20	24	13	16

1 dB COMP.: +1 dBm typ.

Conversion Loss increases when IF is above 150 MHz.

L = low range [f_L to 10 f_L]m = mid band [2 f_L to f_L/2]M = mid range [10 f_L to f_L/2]U = upper range [f_L/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 +4dBm	LO +4dBm	LO +4dBm	LO +4dBm	LO +4dBm
10.10	40.10	7.11	73.60	61.44	1.50	1.25
50.10	80.10	6.95	64.82	48.24	1.48	1.20
100.10	70.10	7.02	60.58	42.69	1.47	1.19
143.85	113.85	6.98	58.32	40.57	1.45	1.19
191.35	161.35	6.97	56.93	39.20	1.44	1.18
262.60	232.60	6.82	55.91	37.54	1.41	1.20
310.10	280.10	6.80	55.22	36.17	1.39	1.24
357.60	327.60	6.75	54.50	34.01	1.39	1.25
405.10	375.10	6.78	53.05	31.84	1.38	1.27
452.60	422.60	6.74	51.42	30.10	1.37	1.32
500.10	470.10	6.82	49.97	27.89	1.38	1.37
552.10	522.10	6.72	51.89	26.26	1.34	1.36
616.10	586.10	6.76	66.73	24.80	1.30	1.44
648.10	618.10	6.72	57.27	24.21	1.29	1.48
712.10	682.10	6.89	47.16	23.25	1.33	1.52
776.10	746.10	7.00	47.22	22.14	1.38	1.57
840.10	810.10	7.13	50.02	20.82	1.42	1.57
904.10	874.10	7.10	58.49	19.62	1.46	1.49
968.10	938.10	6.57	57.19	18.18	1.42	1.51
1000.10	970.10	6.41	49.70	17.55	1.41	1.54

Electrical Schematic

