

Frequency Mixer

ZX05-C24MH-S+

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

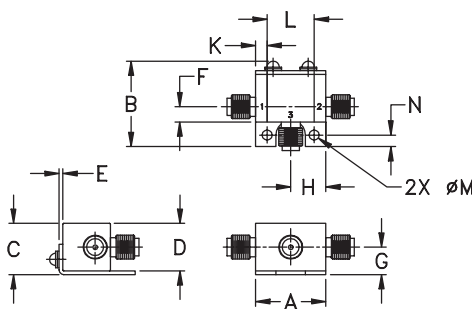
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

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

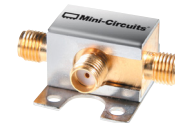
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

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
SMA	ZX05-C24MH-S+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications (T_{AMB}=25°C)

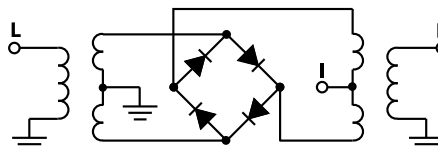
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF f_L - f_U	IF	Mid-Band m			Typ.	Min.	Typ.	Min.	
		$\overline{X}$	σ	Max.					
300-2400	DC-700	6.1	0.1	8.6	40	20	25	14	13

1 dB COMP: +9 dBm typ.
m= mid band $[2f_L \text{ to } f_U/2]$

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 +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



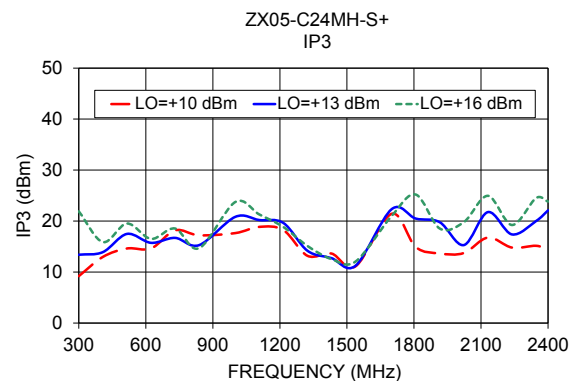
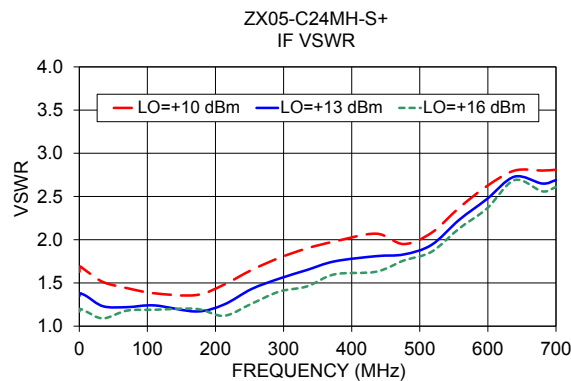
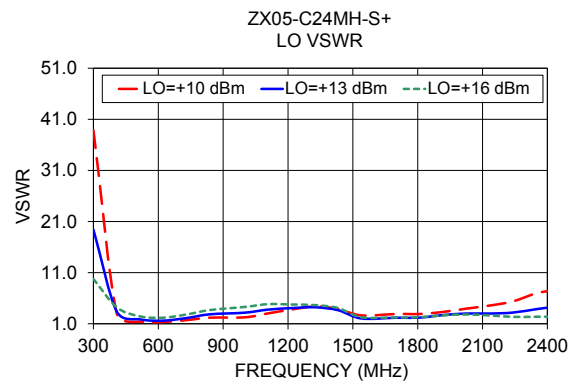
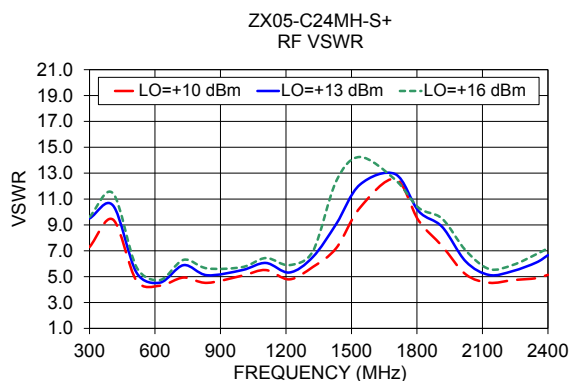
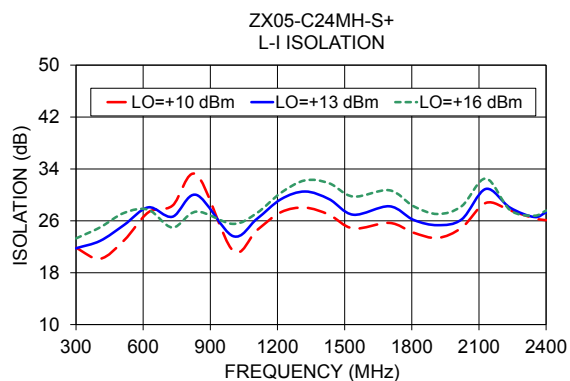
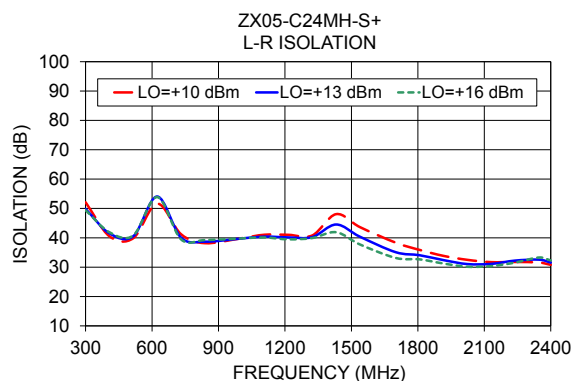
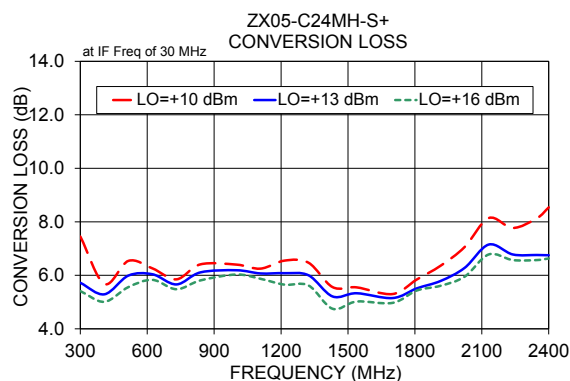
Notes

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Performance Charts

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