

Frequency Mixer

ZX05-C24LH-S+

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

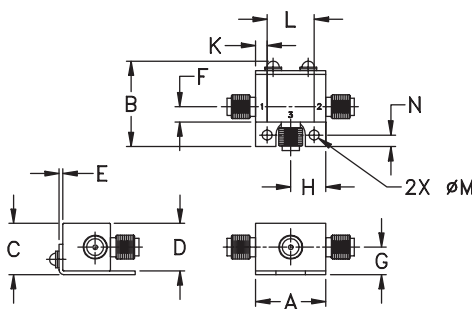
Maximum Ratings

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

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

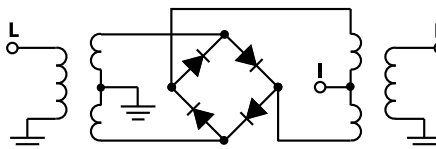
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF	IF	Mid-Band m							
f _L -f _U		$\overline{X}$	σ	Max.	Typ.	Min.	Typ.	Min.	
300-2400	DC-700	6.5	0.1	8.9	40	25	30	15	13

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

Typical Performance Data

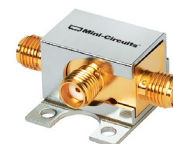
Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
300.10	330.11	5.70	53.04	22.52	2.14	15.23
407.79	437.80	5.14	42.05	23.01	1.71	3.78
515.49	545.50	6.04	39.80	25.36	2.99	1.99
623.18	653.19	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



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



Generic photo used for illustration purposes only

CASE STYLE: FL905

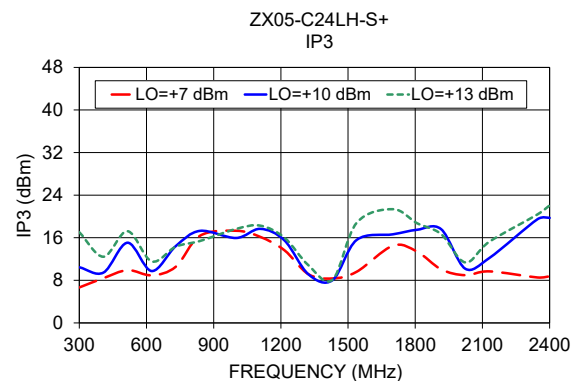
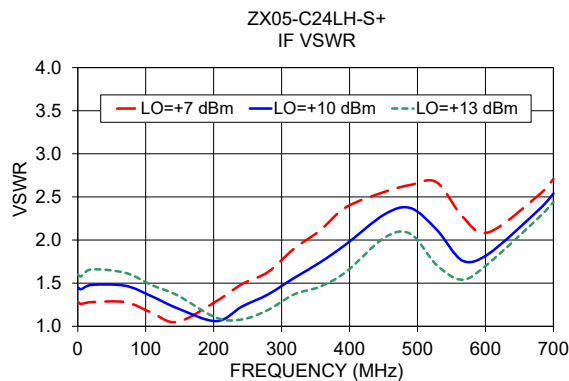
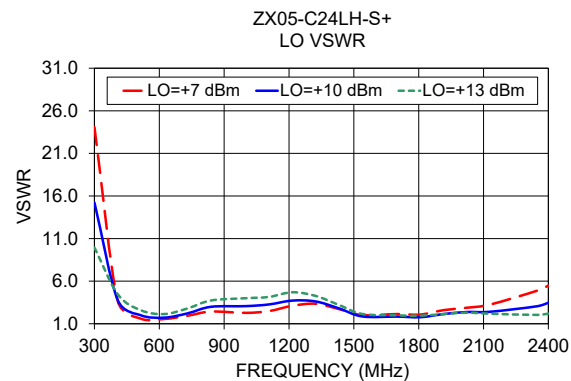
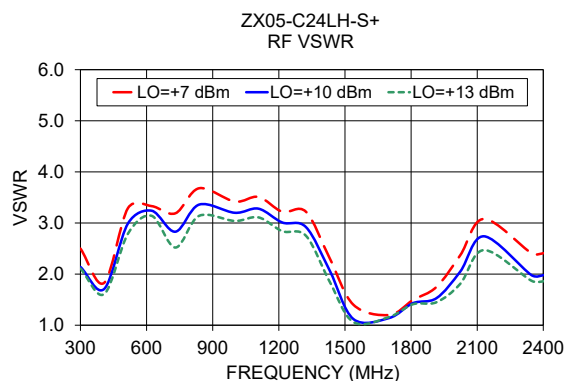
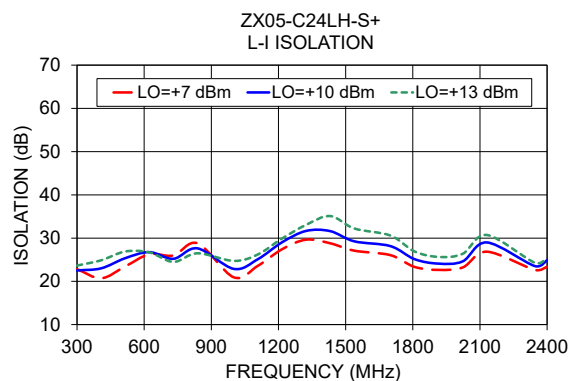
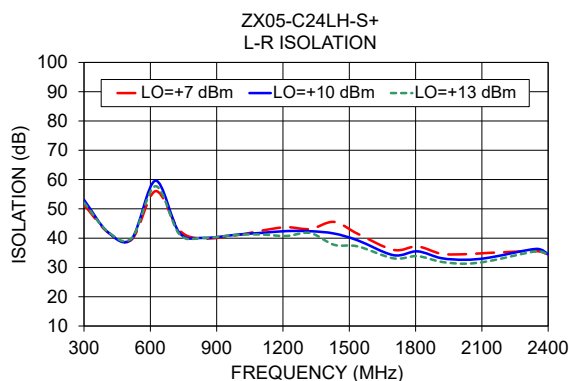
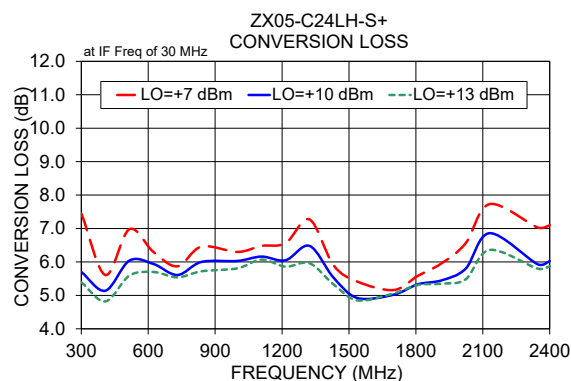
Connectors	Model
SMA	ZX05-C24LH-S+

+RoHS Compliant

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

Performance Charts

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