

Frequency Mixer

ZX05-C42LH-S+

Level 10 (LO Power +10 dBm) 1000 to 4200 MHz

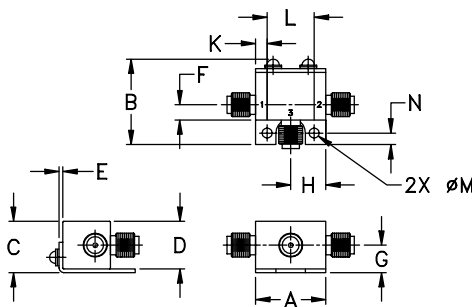
Maximum Ratings

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	

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

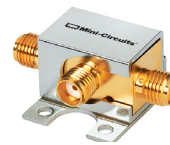
H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

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



Generic photo used for illustration purposes only

CASE STYLE: FL905

Connectors	Model
SMA	ZX05-C42LH-S+

+RoHS Compliant

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

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

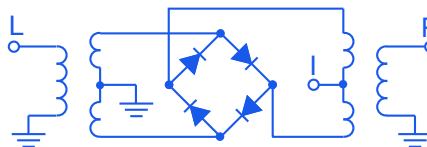
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF f_L - f_U	IF	Mid-Band		Total Range Max.	Typ.	Min.	Typ.	Min.	
		$\overline{X}$	σ						
1000-4200	DC-1500	6.0	0.1	8.9	38	23	20	11	12

1 dB COMP.: +5 dBm typ.

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
1000.10	1030.11	6.03	34.30	21.03	2.05	4.82
1164.20	1194.21	6.07	38.94	23.53	2.79	3.40
1328.31	1358.32	5.80	41.49	24.19	2.70	2.70
1492.41	1522.42	5.62	37.25	22.47	2.56	2.56
1656.51	1686.52	6.01	34.61	23.83	2.63	2.77
1820.61	1850.62	5.78	36.80	22.55	2.38	2.88
1984.72	2014.73	5.83	36.71	23.16	2.08	2.69
2148.82	2178.83	5.76	36.51	21.04	2.08	2.94
2312.92	2342.93	6.09	38.06	17.33	2.32	3.36
2477.02	2507.03	5.97	45.22	17.42	1.87	3.53
2641.13	2671.14	6.76	47.29	18.98	2.35	3.87
2805.23	2835.24	6.50	37.96	20.27	2.58	3.95
2969.33	2999.34	5.98	38.34	21.07	1.95	2.91
3133.43	3163.44	5.77	37.70	23.91	1.93	2.94
3297.54	3327.55	5.62	36.47	24.37	1.90	2.57
3543.69	3573.70	5.91	30.89	25.64	1.86	2.15
3707.79	3737.80	5.97	30.65	26.02	2.34	2.16
3871.90	3901.91	6.55	28.54	26.39	2.92	2.24
4036.00	4066.01	7.20	27.27	27.80	2.94	2.35
4200.10	4170.09	7.02	27.83	22.26	2.62	2.87

Electrical Schematic



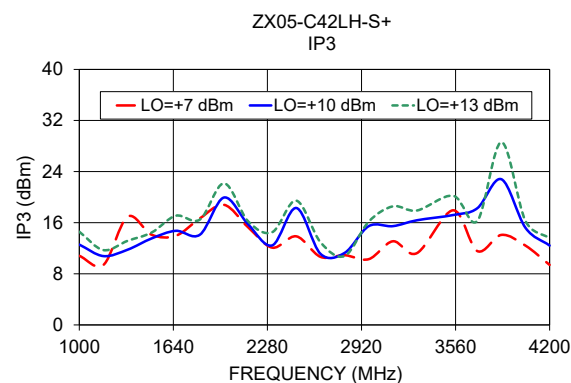
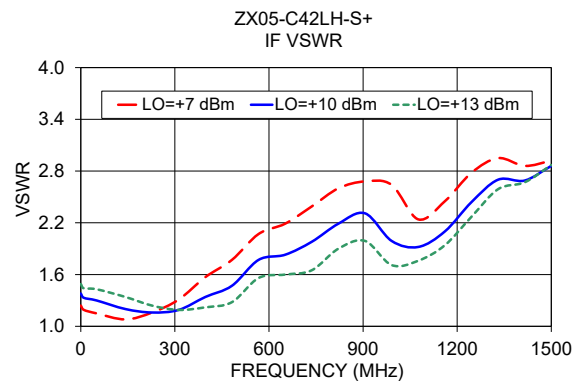
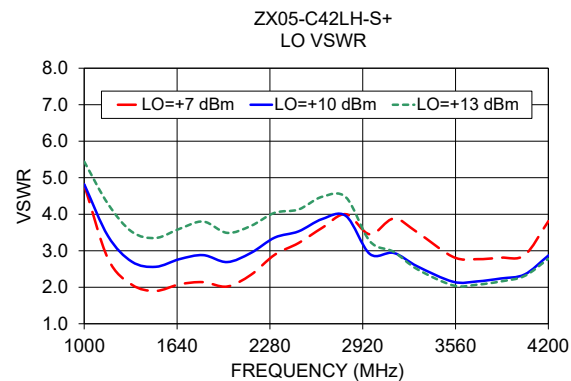
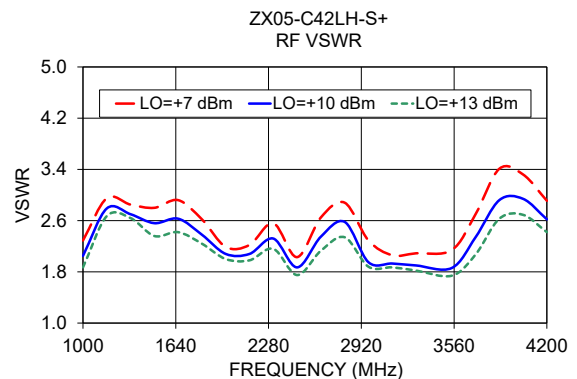
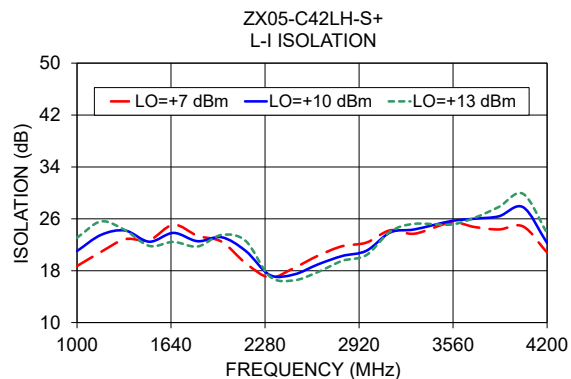
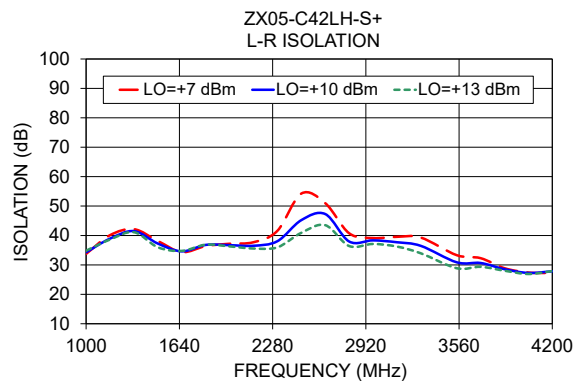
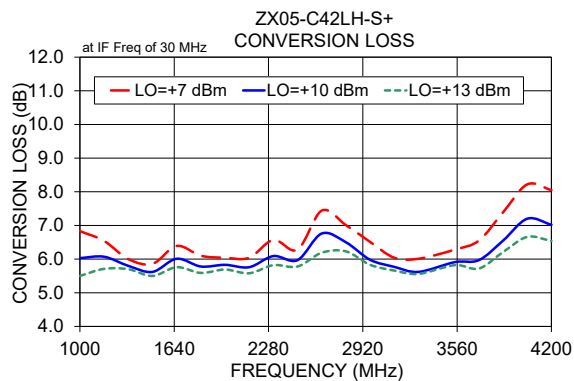
Notes

- 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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp



Performance Charts

ZX05-C42LH-S+



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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

