

Up Converter Frequency Mixer

Level 17 (LO Power +17 dBm) 10 to 7100 MHz

ZX05-U712H+



Maximum Ratings

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

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

LO	1
IF (IN)	2
RF (OUT)	3

Features

- up converter mixer
- low conversion loss, 7.5 dB typ.
- high IP3, 27 dBm typ.
- rugged construction
- small size
- protected by US patents, 6,790,049 and 7,027,795

Applications

- cellular infrastructure
- WIMAX
- line-of-sight links
- wide band receivers
- bluetooth

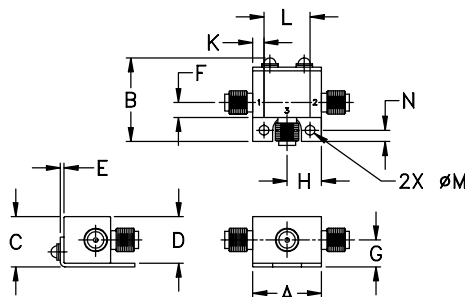
CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZX05-U712H-S+	\$48.95	(1-24)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

Electrical Specifications

FREQUENCY (MHz)			CONVERSION LOSS* (dB)			LO-IF (IN) ISOLATION (dB)		LO-RF (OUT) ISOLATION (dB)		IP3 at center band (dBm)
IF (IN)	LO	RF (OUT)	Typ.	σ**	Max.	Typ.	Min.	Typ.	Min.	Typ.
2600-7100	10-1780	2600-7100	7.5	0.3	9.2	30	17	24	15	27

1 dB COMPR. +14 dBm typ.

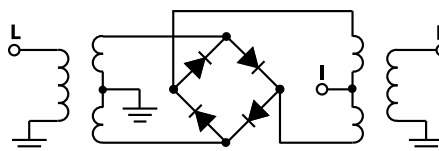
* Conversion Loss at 30 MHz LO

** σ is a standard deviation

Typical Performance Data

Frequency (MHz)			Conversion Loss (dB)	VSWR RF Port (:1)	Frequency (MHz)	Isolation L-I (dB)	Isolation L-R (dB)	VSWR LO Port (:1)
IF (IN)	LO	RF (OUT)	LO +17dBm	LO +17dBm		LO +17dBm	LO +17dBm	LO +17dBm
2600.10	30.00	2630.10	7.83	1.32	10.10	69.72	54.09	1.33
2800.10	30.00	2830.10	7.15	1.47	100.10	51.66	38.75	1.32
3000.10	30.00	3030.10	6.97	1.61	200.10	45.94	34.10	1.38
3400.10	30.00	3430.10	7.08	2.07	300.10	41.85	31.17	1.48
3600.10	30.00	3630.10	7.22	2.23	400.10	39.69	28.59	1.60
3800.10	30.00	3830.10	7.51	2.42	500.10	37.41	26.06	1.62
4000.10	30.00	4030.10	7.43	2.55	600.10	35.37	24.40	1.62
4400.10	30.00	4430.10	7.48	2.77	700.10	34.28	22.62	1.63
4600.10	30.00	4630.10	7.18	2.72	800.10	32.48	21.55	1.67
4800.10	30.00	4830.10	7.28	2.65	900.10	31.01	21.20	1.80
5000.10	30.00	5030.10	7.20	2.62	1000.10	30.18	21.05	1.97
5200.10	30.00	5230.10	7.40	2.57	1100.10	28.34	20.83	2.20
5400.10	30.00	5430.10	7.53	2.46	1200.10	27.15	20.30	2.41
5600.10	30.00	5630.10	7.76	2.40	1300.10	26.11	19.80	2.56
5800.10	30.00	5830.10	7.81	2.16	1400.10	24.55	19.67	2.67
6000.10	30.00	6030.10	7.83	1.96	1500.10	23.55	19.71	2.76
6200.10	30.00	6230.10	7.55	1.73	1600.10	22.84	19.33	2.93
6400.10	30.00	6430.10	7.33	1.58	1700.10	21.54	18.71	3.00
6600.10	30.00	6630.10	7.09	1.59	1720.10	21.24	18.63	3.06
7100.10	30.00	7130.10	7.37	1.80	1780.10	20.77	18.34	3.08

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

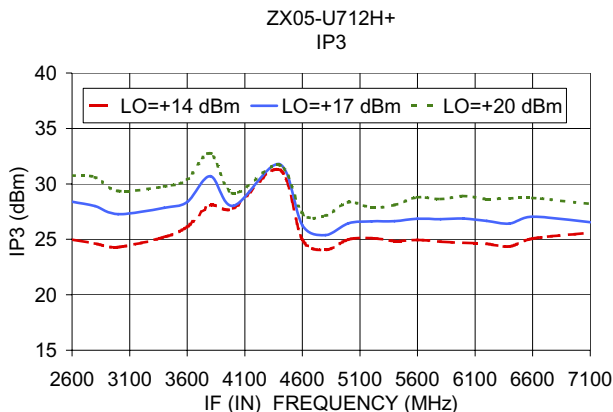
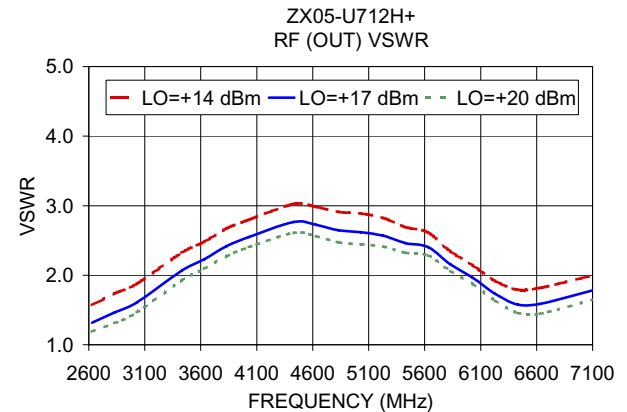
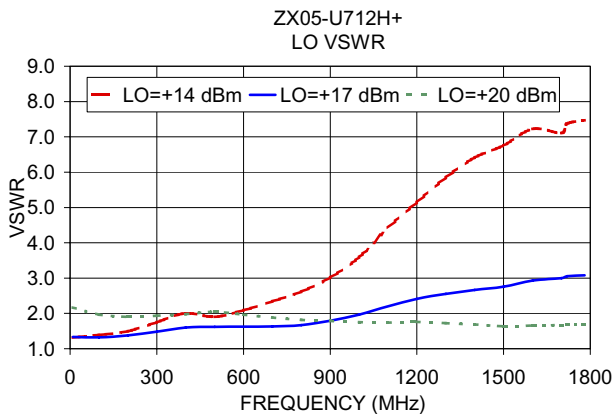
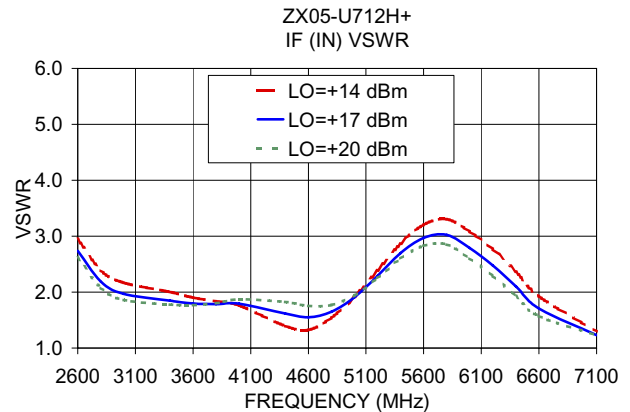
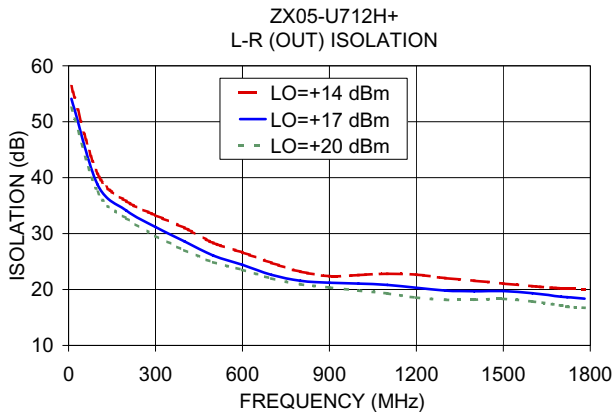
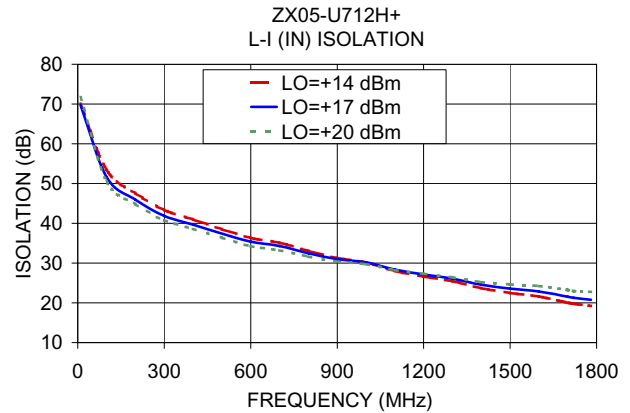
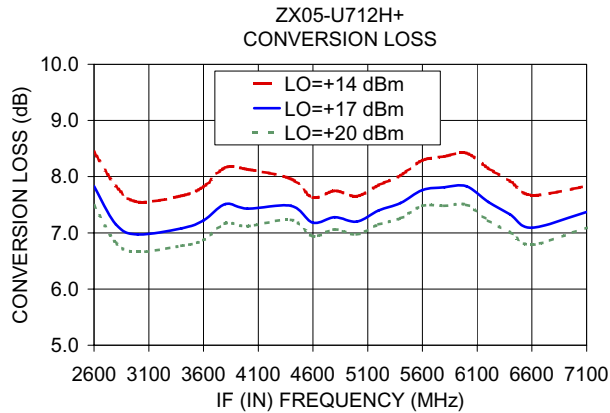
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Performance Charts

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