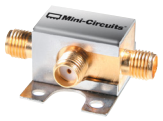
Up Converter

Frequency Mixer

ZX05-U712H+

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



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-U712H-S+

+RoHS Compliant

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

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

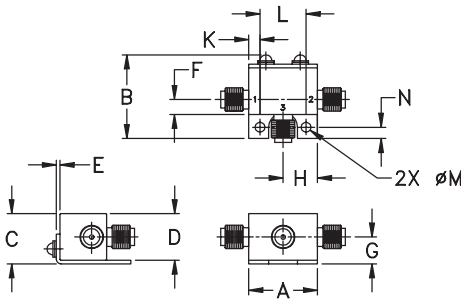
Features

- 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

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

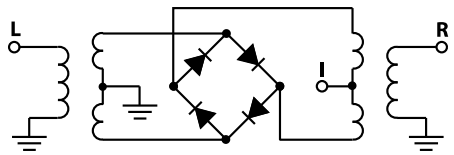
FREQUENCY (MHz)			CONVERSION LOSS* (dB)			LO-IF (IN) ISOLATION (dB)		LO-RF (OUT) ISOLATION (dB)		IP3 at center band (dBm)
IF (IN)	LO	RF (OUT)	Typ.	σ**	Max.	Typ.	Min.	Typ.	Min.	Typ.
2600-7100	10-1780	2600-7100	7.5	0.3	9.2	30	17	24	15	27

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



Notes

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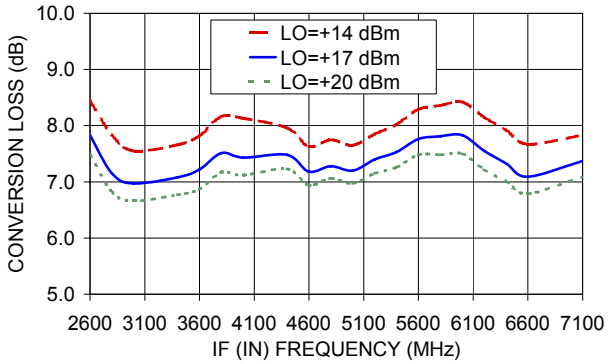
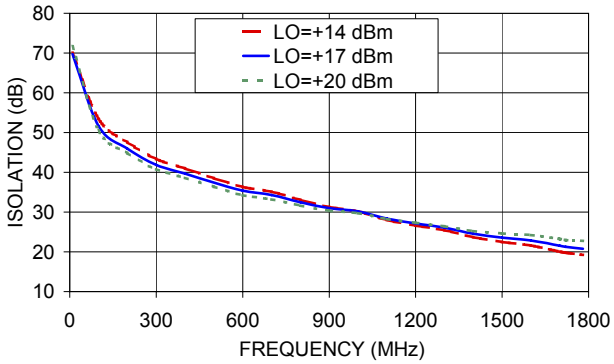
REV. A
M151107
ZX05-U712H+
ED-12902/18
DJ/CP/AM
151009

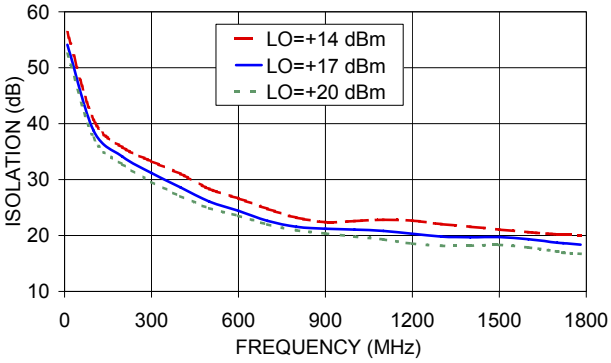
ZX05-U712H+
CONVERSION LOSS



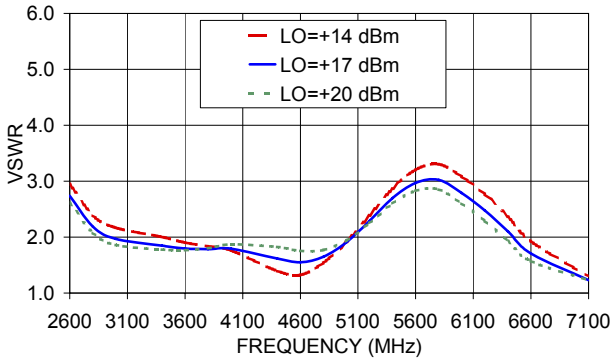
ZX05-U712H+
L-I (IN) ISOLATION



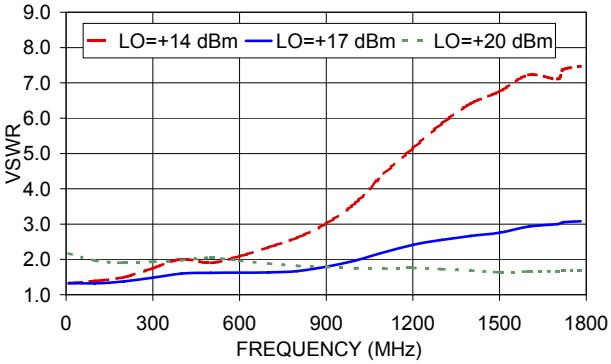
ZX05-U712H+
L-R (OUT) ISOLATION



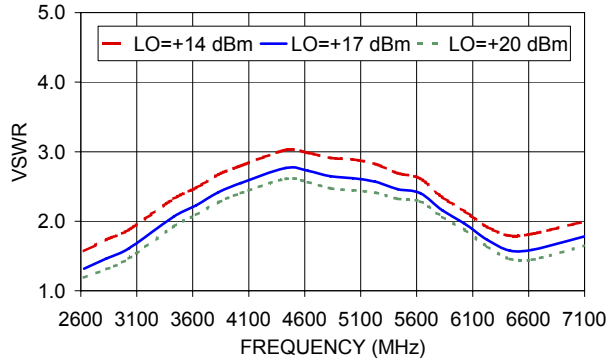
ZX05-U712H+
IF (IN) VSWR



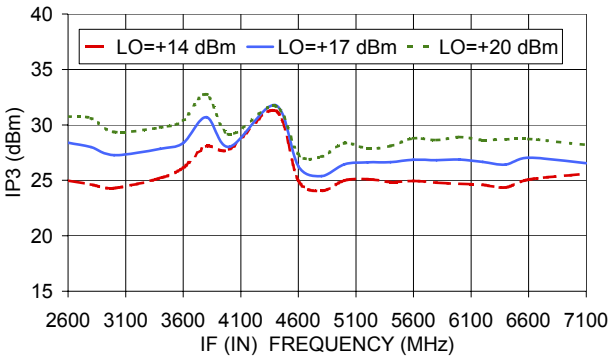
ZX05-U712H+
LO VSWR



ZX05-U712H+
RF (OUT) VSWR



ZX05-U712H+
IP3



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