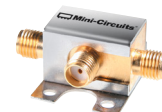


Up Converter Frequency Mixer

ZX05-U742MH+

Level 13 (LO Power +13 dBm) 0.1 to 7400 MHz



Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
IF Power	50mW
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

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

Features

- up converter mixer
- low conversion loss, 8.3 dB typ.
- high IP3, 20 dBm typ.
- rugged construction
- small size
- protected by US patents, 6,790,049 and 7,027,795

CASE STYLE: FL905

Connectors Model
SMA ZX05-U742MH-S+

+RoHS Compliant

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

Applications

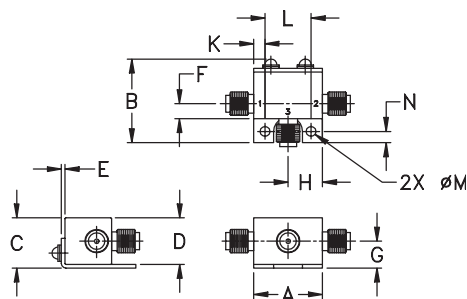
- instrumentation
- wide band receivers
- ISM

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.
0.1-3300	2300-7400	2300-7400	8.3	0.2	9.9	23	10	25	11	20

1 dB COMPR. +9 dBm typ.
* Conversion Loss at 4075 MHz RF
** σ is a standard deviation

Outline Drawing



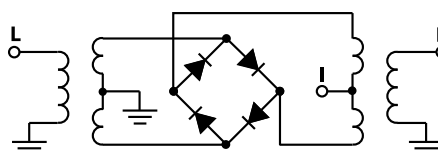
Outline Dimensions (inch/mm)

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

Typical Performance Data

Frequency (MHz)			Conversion Loss (dB)	Freq. (MHz)	Isolation L-I (dB)	Isolation L-R (dB)	VSWR LO Port (:1)	VSWR RF (OUT) Port (:1)
IF (IN)	LO	RF (OUT)	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
10.10	4085.10	4075.00	5.57	2300.10	21.13	38.74	2.92	2.95
100.10	4175.10	4075.00	5.36	2600.10	26.47	35.51	2.17	3.33
300.10	4375.10	4075.00	5.43	2900.10	28.02	30.76	1.89	3.40
500.10	4575.10	4075.00	5.56	3200.10	26.53	27.62	1.82	3.19
700.10	4775.10	4075.00	5.99	3500.10	23.07	27.19	1.96	2.47
900.10	4975.10	4075.00	6.27	3800.10	23.29	26.81	2.17	2.35
1100.10	5175.10	4075.00	7.07	4100.10	28.75	25.94	2.69	2.47
1300.10	5375.10	4075.00	7.99	4400.10	23.50	23.80	3.31	2.61
1500.10	5575.10	4075.00	8.41	4700.10	15.33	22.60	3.80	2.51
1700.10	5775.10	4075.00	8.80	5000.10	13.50	21.09	4.23	3.21
1900.10	5975.10	4075.00	8.78	5300.10	13.95	20.80	4.70	3.40
2100.10	6175.10	4075.00	8.45	5600.10	15.79	20.24	4.55	3.49
2300.10	6375.10	4075.00	7.73	5900.10	19.40	19.04	3.76	3.29
2500.10	6575.10	4075.00	7.42	6200.10	24.99	17.57	2.67	3.31
2700.10	6775.10	4075.00	7.02	6500.10	31.86	16.35	1.87	3.10
2900.10	6975.10	4075.00	6.74	6800.10	32.02	15.61	1.88	2.67
3100.10	7175.10	4075.00	6.89	7100.10	26.63	15.09	3.00	2.72
3200.10	7275.10	4075.00	7.13	7300.10	20.91	15.81	4.08	3.21
3250.10	7325.10	4075.00	7.33	7350.10	19.57	15.70	4.32	2.68
3300.10	7375.10	4075.00	7.70	7400.10	19.47	16.10	4.73	3.67

Electrical Schematic



Notes

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- 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-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

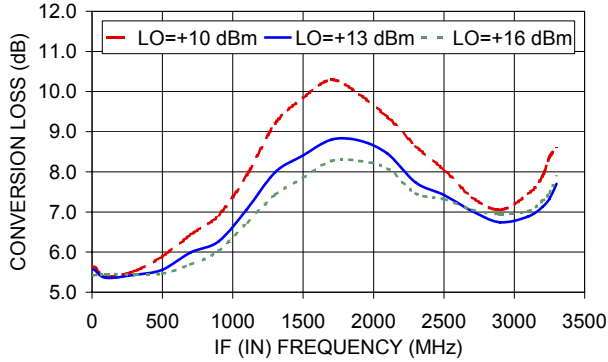
REV. A
M151107
ZX05-U742MH+
ED-12902/19
DJ/CP/AM
151009



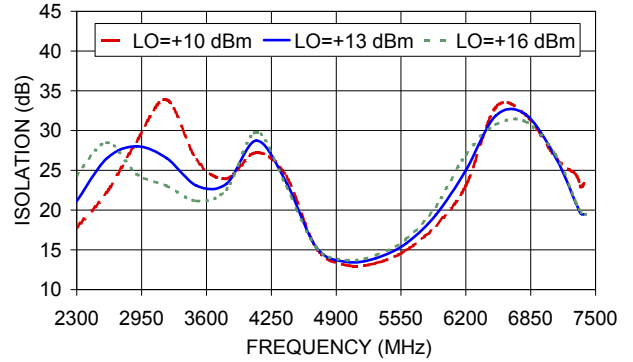
Performance Charts

ZX05-U742MH+

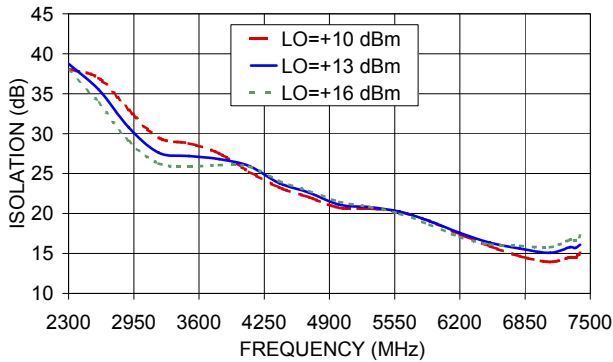
ZX05-U742MH+
CONVERSION LOSS



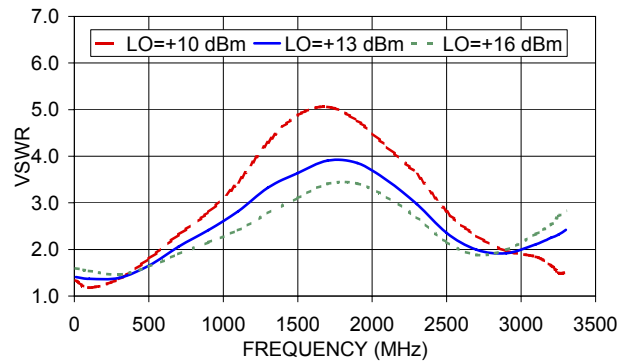
ZX05-U742MH+
L-I (IN) ISOLATION



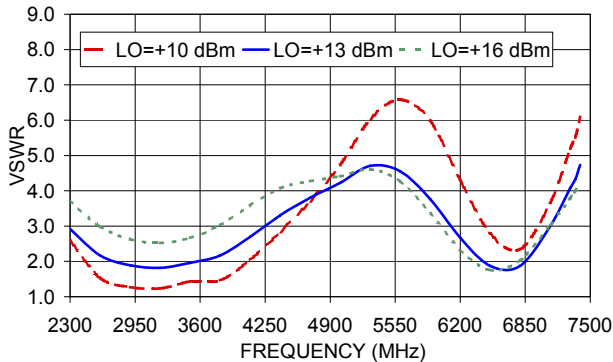
ZX05-U742MH+
L-R (OUT) ISOLATION



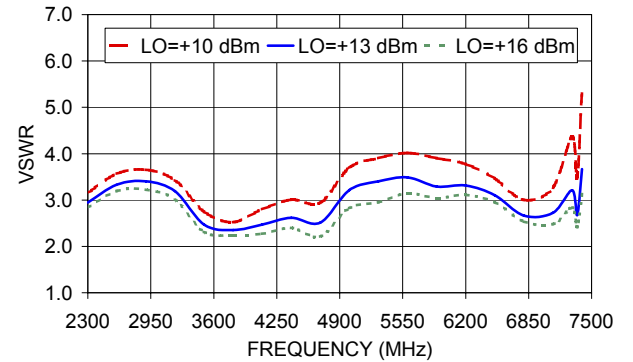
ZX05-U742MH+
IF (IN) VSWR



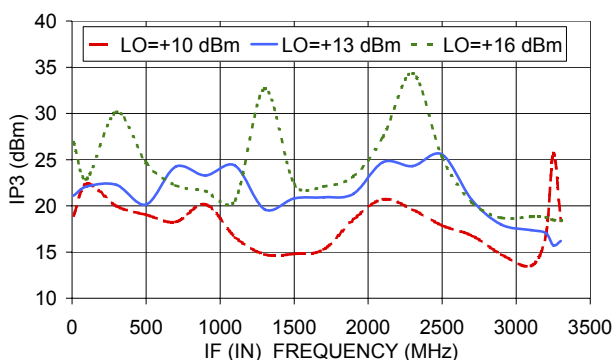
ZX05-U742MH+
LO VSWR



ZX05-U742MH+
RF (OUT) VSWR



ZX05-U742MH+
IP3



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