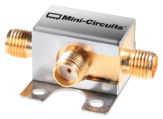
Coaxial

Frequency Mixer WIDE BAND

ZX05-43H+

Level 17 (LO Power +17 dBm) 1000 to 4000 MHz



CASE STYLE: FL905

Connectors	Model
SMA	ZX05-43H-S+

Maximum Ratings

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

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

Coaxial Connections

LO	2
RF	3
IF	1

Features

- wide bandwidth, 1000 to 4000 MHz, useable down to 800 MHz
- low conversion loss, 6.1 dB typ.
- excellent L-R isolation, 35 dB typ.
- rugged construction
- small size
- useable as up and down converter
- protected by US patents, 6,790,049 and 7,027,795

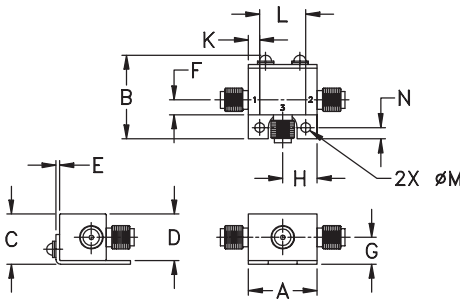
+RoHS Compliant

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

Applications

- cellular
- defense and weather radar
- defense communications
- PCN
- WCDMA
- WIFI
- blue tooth
- VSAT
- ISM

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-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF f_L-f_U	IF	Typ.	σ	Max.	Typ.	Min.	Typ.	Min.	Typ.
1000-4000	**DC-1500**								
1000-2500		6.5	0.1	9.3	37	32	22	7	22
2500-4000		6.0	0.1	9.6	31	25	21	10	22

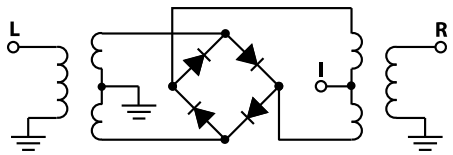
1 dB COMPR.: +14 dBm typ.

* Conversion loss at 30 MHz IF. σ is a measure of repeatability from unit to unit.

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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
1000.10	1030.10	7.95	37.91	24.63	2.64	1.90
1200.10	1230.10	6.57	43.66	28.59	3.37	1.42
1400.10	1430.10	6.28	38.32	31.65	3.61	2.05
1600.10	1630.10	6.57	36.58	25.15	3.63	2.17
1800.10	1830.10	6.89	37.44	17.66	3.90	1.85
2000.10	2030.10	7.00	36.67	10.13	3.84	1.26
2200.10	2230.10	6.97	39.95	9.74	3.90	1.50
2400.10	2430.10	6.36	37.84	12.34	2.96	2.34
2500.10	2530.10	7.89	42.17	13.94	3.97	2.62
2600.10	2630.10	8.97	38.42	15.44	4.32	2.72
2700.10	2730.10	7.12	37.70	16.93	3.29	2.70
2800.10	2830.10	6.62	35.31	18.55	2.39	2.73
2900.10	2930.10	5.86	39.36	20.26	1.80	2.86
3000.10	3030.10	5.50	35.81	23.07	1.35	2.91
3100.10	3130.10	5.24	32.82	25.94	1.19	2.57
3200.10	3230.10	5.25	31.48	27.83	1.19	2.19
3400.10	3430.10	5.69	30.99	23.88	1.28	1.61
3600.10	3630.10	6.16	27.70	21.27	1.92	1.67
3800.10	3830.10	6.60	27.93	18.12	2.65	2.30
4000.10	4030.10	7.95	29.47	19.70	3.90	3.89

Electrical Schematic

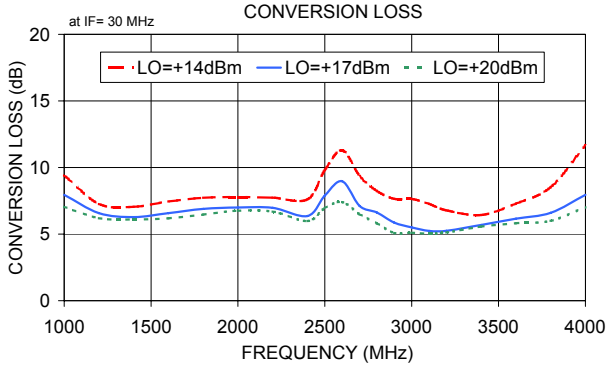


Notes

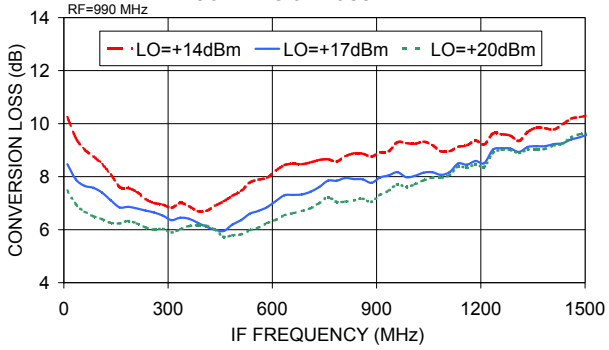
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REV. A
M151107
ZX05-43H+
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DJ/TD/QL
151009

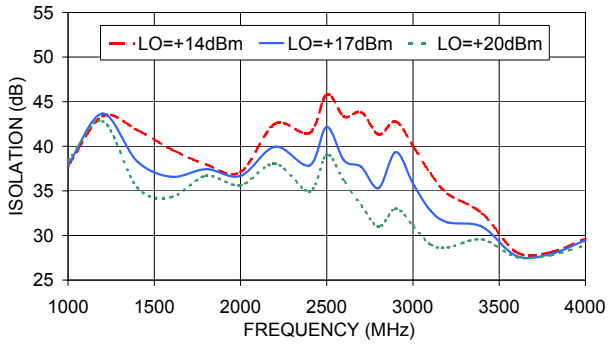
ZX05-43H+
CONVERSION LOSS



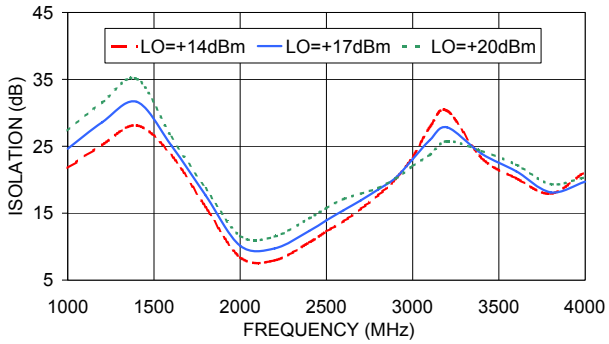
ZX05-43H+
CONVERSION LOSS VARIABLE IF



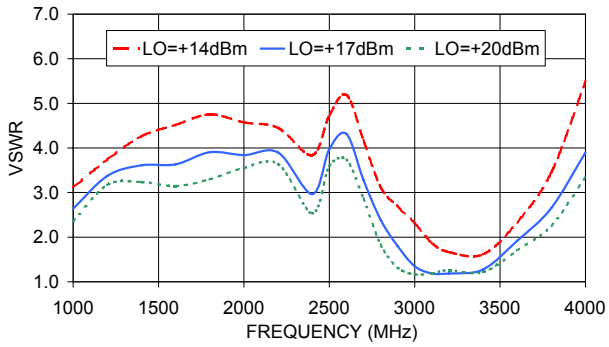
ZX05-43H+
L-R ISOLATION



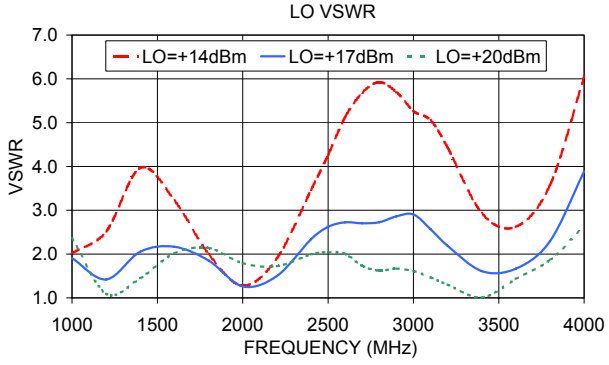
ZX05-43H+
L-I ISOLATION



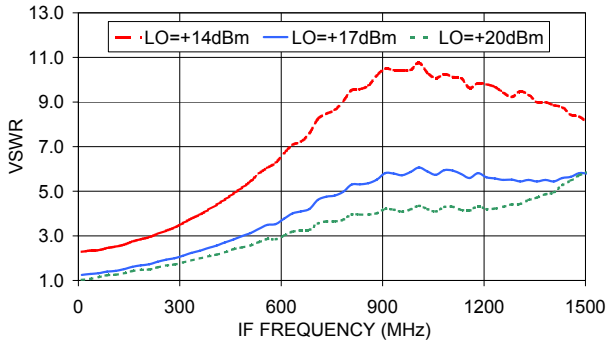
ZX05-43H+
RF VSWR



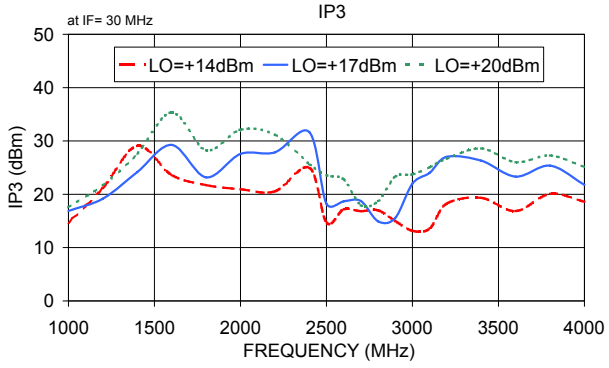
ZX05-43H+
LO VSWR



ZX05-43H+
IF VSWR



ZX05-43H+
IP3



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