

Coaxial

Voltage Controlled Oscillator

ZX95-100+

Linear Tuning 50 to 100 MHz

Features

- linear tuning
- octave bandwidth
- low phase noise
- low pushing & pulling
- excellent harmonic suppression
- protected by US patent 6,790,049



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-100-S+	\$37.95 ea.	(1-9)

Applications

- R & D
- lab
- instrumentation
- test equipment

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

Electrical Specifications

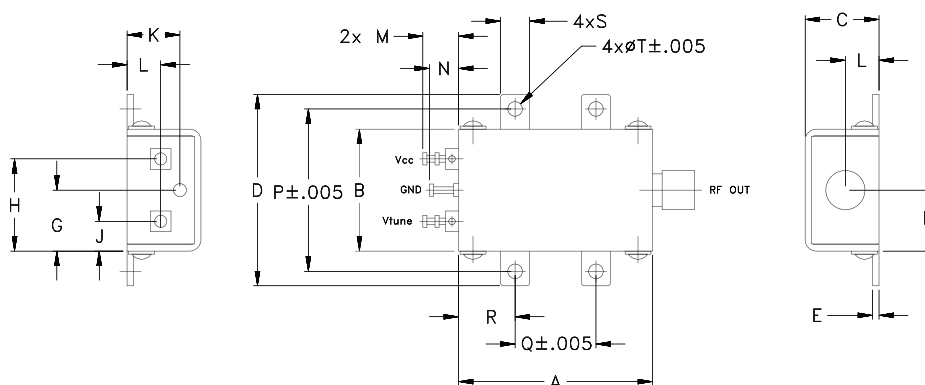
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Typ.	Max.
ZX95-100+	50	100	+10	-86	-110	-131	-151	0.5	17	3.5-4.5	550	0.18	-90	-33	-24	0.4	0.1	12	20

Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	13V
Absolute Max. Tuning Voltage (Vtune)	18V
All specifications	50 ohm system

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt.
1.20	.75	.46	1.18	.04	.38	.38	.57	.18	.33	.21	.22	.18	1.00	.50	.35	.18	.106	grams
30.48	19.05	11.68	29.97	1.02	9.65	9.65	14.48	4.57	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0



For detailed performance specs & shopping online see web site

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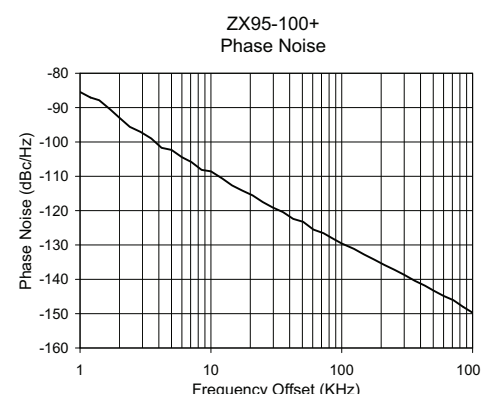
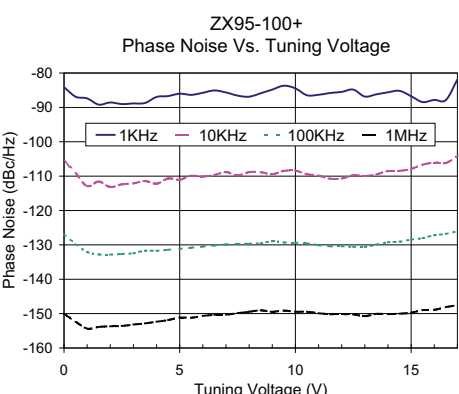
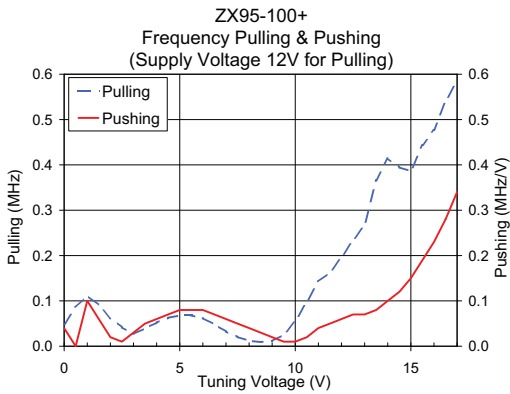
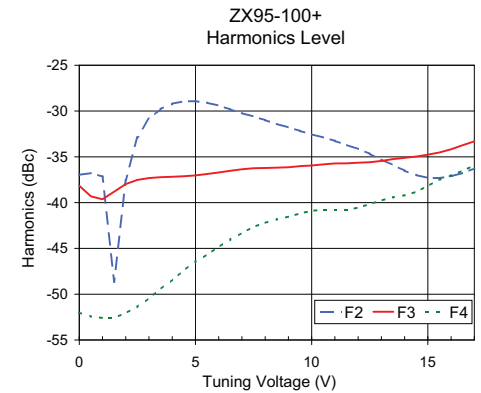
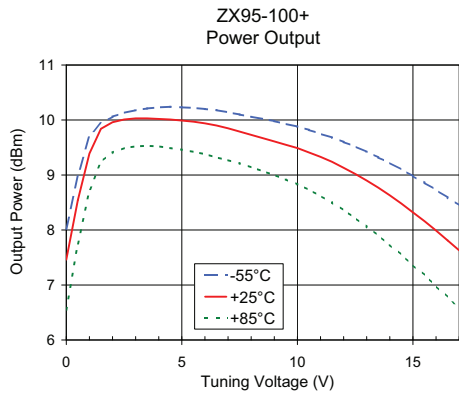
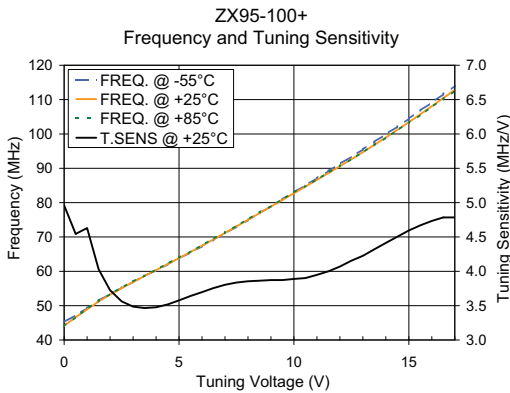
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Page 1 of 2

Performance Data & Curves*

ZX95-100+

V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 75 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	4.96	45.2	44.1	44.0	8.02	7.46	6.55	16.08	-37.0	-38.2	-52.0	0.04	0.05	-84.1	-105.4	-126.9	-150.0	1.0	-85.44
0.50	4.54	47.2	46.6	46.7	8.98	8.54	7.74	15.81	-36.8	-39.3	-52.4	0.00	0.09	-86.9	-109.1	-129.7	-152.3	2.0	-92.96
1.00	4.63	49.3	48.9	49.1	9.71	9.39	8.71	15.47	-37.2	-39.6	-52.6	0.10	0.11	-87.4	-112.9	-132.1	-154.4	3.5	-98.98
2.00	3.72	53.4	53.2	53.4	10.06	9.96	9.41	15.16	-37.5	-38.0	-52.1	0.02	0.06	-88.6	-113.2	-132.8	-153.7	6.0	-104.43
3.00	3.49	56.9	56.9	57.0	10.18	10.03	9.52	14.98	-30.8	-37.3	-50.4	0.03	0.03	-88.8	-112.1	-132.4	-153.2	8.5	-108.14
4.00	3.48	60.3	60.3	60.5	10.23	10.02	9.52	14.88	-29.2	-37.2	-48.4	0.06	0.05	-87.0	-112.2	-131.7	-152.4	10.0	-108.56
5.00	3.58	63.7	63.8	64.0	10.23	9.99	9.46	14.82	-28.9	-37.0	-46.5	0.08	0.07	-86.0	-111.0	-131.1	-151.2	20.8	-115.56
6.00	3.70	67.3	67.4	67.6	10.20	9.94	9.38	14.79	-29.4	-36.7	-44.9	0.08	0.06	-85.8	-110.1	-130.5	-150.7	35.5	-120.41
7.00	3.80	71.1	71.2	71.3	10.14	9.85	9.27	14.79	-30.2	-36.4	-43.3	0.06	0.03	-85.7	-108.8	-129.9	-150.3	60.7	-125.52
8.00	3.86	74.9	75.0	75.2	10.06	9.73	9.14	14.79	-31.0	-36.2	-42.2	0.04	0.01	-86.9	-108.8	-129.7	-149.5	86.7	-128.28
9.00	3.87	78.9	78.8	79.1	9.98	9.61	9.00	14.80	-31.8	-36.1	-41.5	0.02	0.01	-84.8	-109.4	-128.9	-149.5	100.0	-129.57
10.00	3.89	83.0	82.7	82.9	9.88	9.49	8.83	14.80	-32.5	-36.0	-40.9	0.01	0.05	-84.5	-108.4	-129.4	-149.5	148.1	-132.77
11.00	3.95	87.1	86.6	86.8	9.75	9.33	8.62	14.79	-33.3	-35.7	-40.8	0.04	0.14	-86.3	-109.9	-130.1	-149.9	211.6	-135.82
12.00	4.07	91.3	90.6	90.7	9.60	9.13	8.36	14.77	-34.2	-35.6	-40.6	0.06	0.20	-85.5	-110.7	-130.4	-150.2	361.5	-140.42
13.00	4.23	95.5	94.7	94.7	9.42	8.90	8.06	14.75	-35.3	-35.5	-39.8	0.07	0.27	-86.9	-110.0	-130.6	-150.7	432.2	-141.86
14.00	4.41	99.9	99.0	98.9	9.22	8.63	7.73	14.72	-36.5	-35.1	-39.2	0.10	0.41	-85.6	-108.5	-129.3	-150.2	507.5	-143.36
15.00	4.59	104.5	103.4	103.3	8.98	8.32	7.36	14.69	-37.3	-34.8	-38.2	0.15	0.39	-86.7	-107.9	-128.5	-149.7	600.0	-144.84
16.00	4.73	109.2	108.1	107.9	8.73	7.99	6.98	14.65	-37.1	-34.2	-37.0	0.23	0.48	-87.8	-106.0	-127.2	-148.9	712.4	-146.08
16.50	4.78	111.6	110.4	110.2	8.59	7.81	6.78	14.64	-36.8	-33.7	-36.5	0.28	0.54	-87.9	-106.2	-126.8	-148.1	851.6	-148.09
17.00	4.78	114.0	112.8	112.5	8.45	7.63	6.57	14.62	-36.3	-33.3	-35.9	0.34	0.59	-81.9	-104.1	-126.0	-147.6	1000.0	-149.73

*at 25°C unless mentioned otherwise



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IF/RF MICROWAVE COMPONENTS

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