

Coaxial

Voltage Controlled Oscillator

ZX95-900+

Linear Tuning 625 to 885 MHz

Features

- low phase noise
- low pulling
- low pushing
- protected by US patent 6,790,049



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communication
- test equipment

Connectors	Model
SMA	ZX95-900-S+

+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.			Max.	Typ.
ZX95-900+	625	885	+5.8	-82	-106	-127	-147	0.5	18	15-26	70	25	-90	-13	-	1.5	0.4	10	35

Maximum Ratings

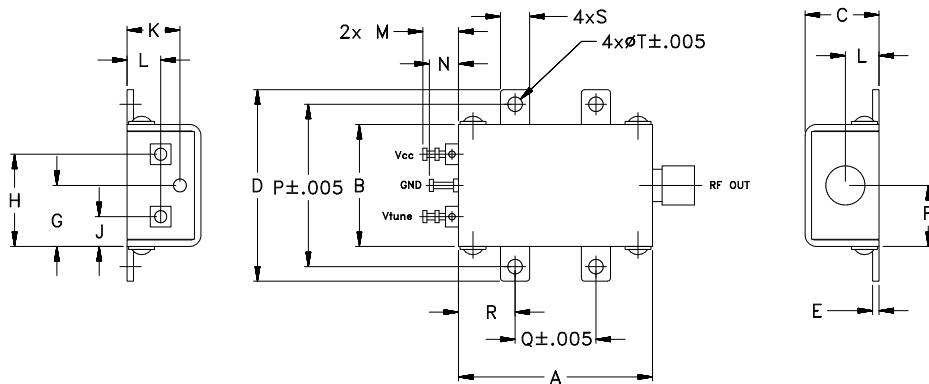
Operating Temperature -55°C to 85°C
 Storage Temperature -55°C to 100°C
 Absolute Max. Supply Voltage (Vcc) 12V
 Absolute Max. Tuning Voltage (Vtune) 20V
 All specifications 50 ohm system

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



NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminals. See Application Note AN-40-10.

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

Notes

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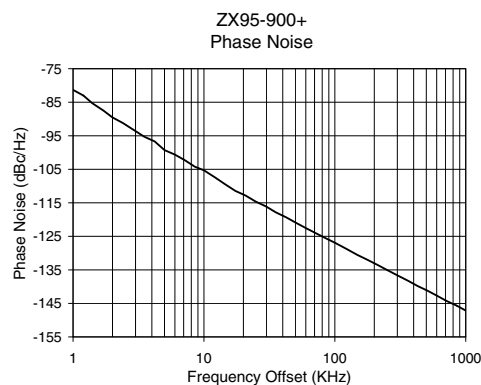
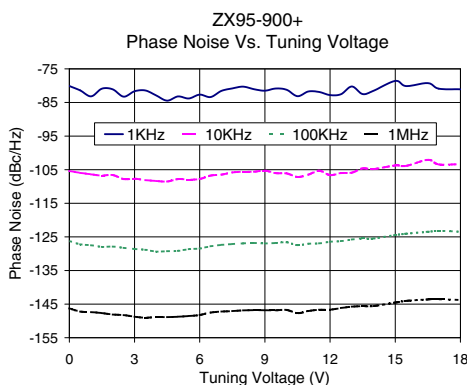
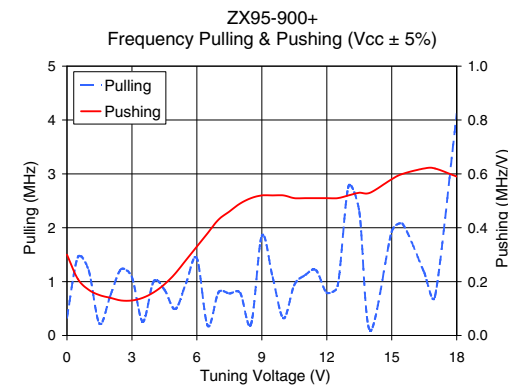
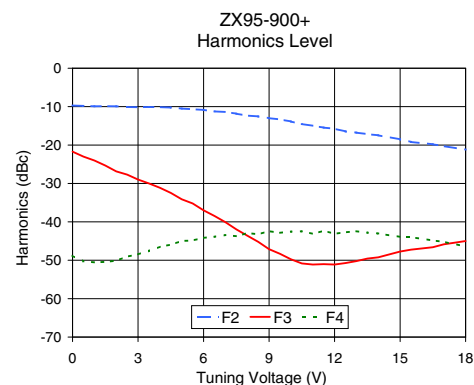
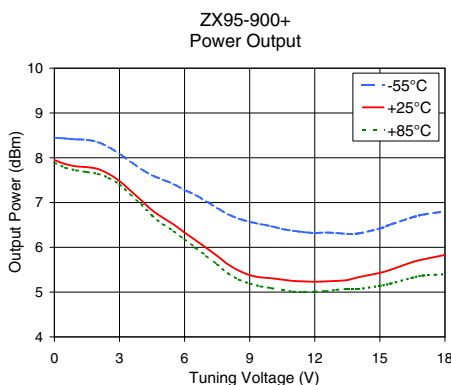
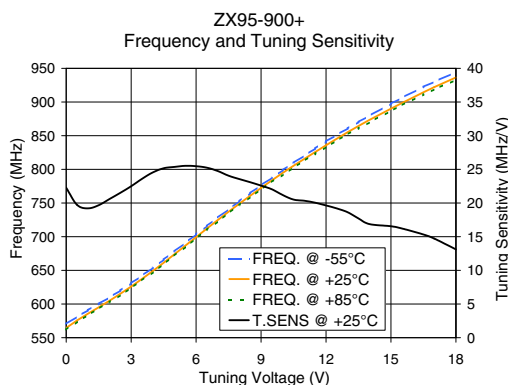
REV. A
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Page 1 of 2

Performance Data & Curves*

ZX95-900+

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 755 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	22.27	570.5	564.5	562.0	8.45	7.95	7.89	28.31	-9.7	-21.7	-48.8	0.30	0.33	-80.1	-105.4	-126.2	-146.3	1.0	-81.32
0.50	19.73	581.2	575.6	573.5	8.43	7.86	7.78	28.37	-9.8	-23.0	-50.3	0.21	1.45	-81.4	-105.9	-127.2	-147.2	2.0	-89.54
1.00	19.21	590.8	585.5	583.6	8.41	7.81	7.72	28.43	-9.9	-24.0	-50.5	0.17	1.21	-83.2	-106.4	-127.5	-147.4	3.5	-95.29
2.00	20.60	610.0	604.9	602.9	8.35	7.75	7.64	28.51	-9.9	-26.9	-50.1	0.14	0.74	-81.1	-106.6	-127.9	-148.1	6.0	-100.63
3.00	22.49	630.9	626.0	623.9	8.09	7.48	7.40	28.59	-10.1	-29.0	-48.5	0.13	1.08	-81.7	-107.7	-128.6	-148.8	8.5	-104.21
4.00	24.55	653.9	649.0	647.1	7.75	7.05	6.96	28.65	-10.1	-31.1	-46.5	0.16	1.00	-82.9	-108.4	-129.4	-148.8	10.0	-105.30
5.00	25.37	678.3	673.9	671.9	7.51	6.66	6.52	28.68	-10.5	-34.1	-45.0	0.23	0.49	-83.2	-107.8	-129.2	-148.8	20.8	-112.83
6.00	25.47	703.4	699.3	697.4	7.28	6.33	6.18	28.68	-10.9	-37.0	-44.2	0.33	1.43	-82.7	-107.8	-128.5	-148.3	35.5	-117.86
7.00	24.75	728.3	724.7	722.6	7.03	5.99	5.81	28.66	-11.4	-40.1	-43.4	0.43	0.80	-81.5	-106.5	-127.4	-147.2	60.7	-122.63
8.00	23.56	752.8	749.1	747.0	6.74	5.62	5.42	28.63	-12.3	-43.6	-42.9	0.49	0.79	-80.3	-105.6	-126.9	-146.9	86.7	-125.72
9.00	22.59	776.3	772.4	770.3	6.57	5.38	5.19	28.58	-13.0	-47.1	-42.4	0.52	1.85	-81.5	-105.3	-126.9	-146.8	100.0	-126.91
10.00	21.19	798.7	794.7	792.0	6.47	5.31	5.09	28.53	-13.9	-49.7	-42.6	0.52	0.32	-81.2	-106.1	-126.6	-146.7	148.1	-130.52
11.00	20.34	820.5	815.6	812.9	6.37	5.25	5.01	28.47	-15.0	-51.1	-43.1	0.51	1.12	-81.7	-106.5	-127.0	-147.1	177.0	-131.99
12.00	19.64	841.5	835.8	833.1	6.32	5.23	5.01	28.41	-15.8	-51.1	-43.1	0.51	0.79	-82.8	-106.6	-126.4	-146.7	211.6	-133.51
13.00	18.62	860.9	855.2	852.1	6.32	5.25	5.05	28.36	-16.8	-50.2	-42.4	0.52	2.77	-80.3	-105.9	-125.8	-145.8	302.4	-136.68
14.00	16.87	879.5	873.4	869.7	6.31	5.33	5.07	28.31	-17.5	-49.2	-43.0	0.53	0.09	-81.5	-104.8	-125.5	-145.6	361.5	-138.22
15.00	16.55	897.5	890.1	886.8	6.42	5.43	5.14	28.25	-18.5	-47.7	-43.9	0.58	1.93	-78.6	-103.8	-124.5	-144.6	507.5	-141.17
15.50	16.22	906.1	898.4	895.1	6.51	5.50	5.19	28.22	-19.2	-47.2	-44.0	0.60	2.07	-80.1	-103.9	-124.1	-144.0	606.7	-142.77
17.00	14.72	930.0	922.1	918.7	6.73	5.73	5.37	28.18	-20.3	-45.9	-45.2	0.62	0.73	-80.9	-103.4	-123.2	-143.6	851.6	-145.65
18.00	13.11	944.3	936.4	932.8	6.80	5.83	5.40	28.17	-21.2	-45.0	-46.4	0.59	4.11	-81.1	-103.4	-123.5	-143.8	1000.0	-147.14

*at 25°C unless mentioned otherwise



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