

Coaxial

Voltage Controlled Oscillator

ZX95-2130+

Linear Tuning 1950 to 2120 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- radiolink



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2130-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)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Max.	Typ.	Max.
ZX95-2130+	1950	2120	+1	-83	-108	-128	-148	0.5	11	22-25	20	130	-90	-16	-	0.2	1	5	37

Maximum Ratings

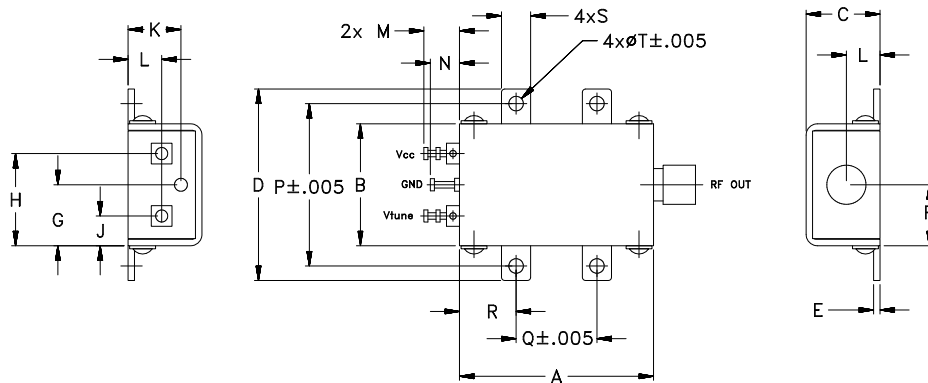
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	13V
All specifications	50 ohm system

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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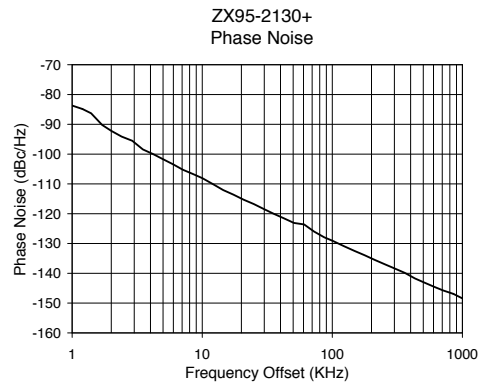
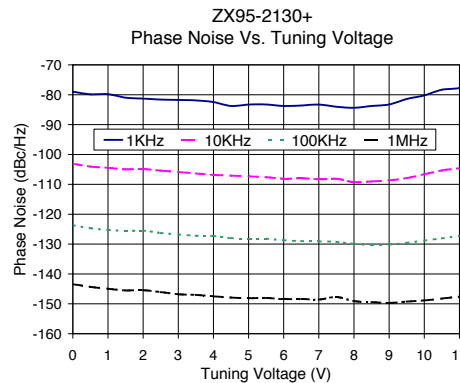
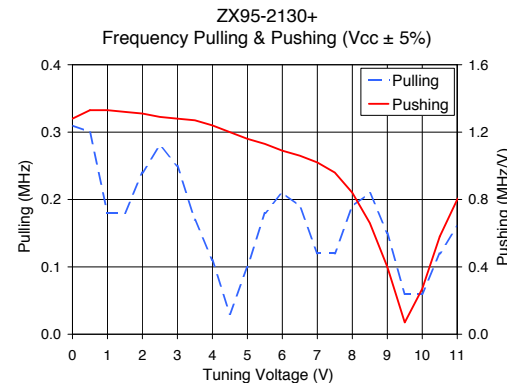
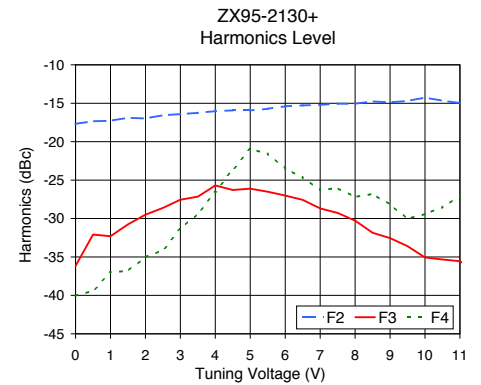
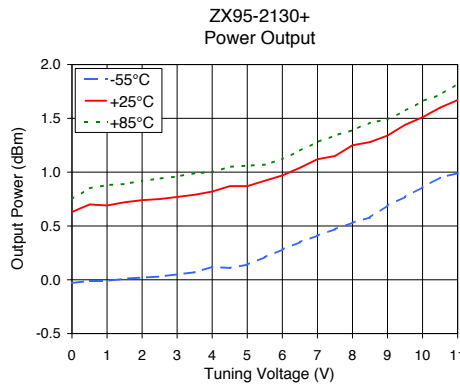
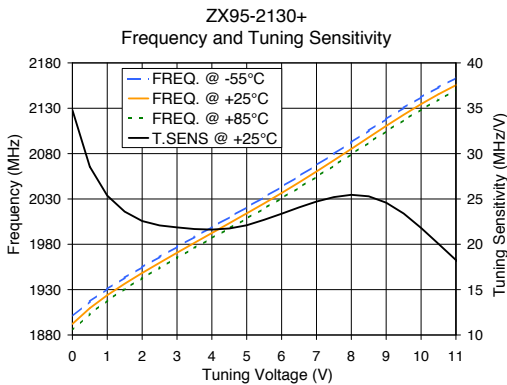
REV. A
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Performance Data & Curves*

ZX95-2130+

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 2040 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	34.81	1900.5	1892.2	1885.0	-0.03	0.63	0.75	29.70	-17.7	-36.2	-40.1	1.28	0.31	-79.0	-103.1	-123.7	-143.4	1.0	-83.72
0.50	28.55	1916.9	1909.6	1903.3	-0.01	0.70	0.85	29.85	-17.3	-32.1	-39.4	1.33	0.30	-79.9	-104.1	-124.7	-144.3	2.0	-92.21
1.00	25.37	1930.7	1923.8	1917.9	-0.01	0.69	0.88	29.97	-17.3	-32.3	-37.0	1.33	0.18	-79.8	-104.5	-125.3	-145.0	3.5	-98.43
1.50	23.60	1943.2	1936.5	1930.8	0.01	0.72	0.89	30.08	-16.9	-30.8	-36.8	1.32	0.18	-81.0	-105.0	-125.6	-145.5	6.0	-103.48
2.00	22.56	1954.8	1948.3	1942.7	0.02	0.74	0.92	30.18	-17.0	-29.5	-35.0	1.31	0.24	-81.3	-104.9	-125.5	-145.4	8.5	-106.70
2.50	22.08	1966.1	1959.6	1954.1	0.03	0.75	0.94	30.27	-16.6	-28.6	-34.1	1.29	0.28	-81.6	-105.4	-126.3	-146.1	10.0	-108.06
3.00	21.86	1977.2	1970.6	1965.1	0.05	0.77	0.96	30.36	-16.4	-27.6	-31.3	1.28	0.25	-81.7	-105.9	-126.8	-146.8	20.8	-115.30
3.50	21.68	1988.1	1981.6	1976.0	0.07	0.79	0.99	30.44	-16.3	-27.2	-29.4	1.27	0.17	-81.9	-106.4	-127.2	-147.0	35.5	-120.02
4.00	21.62	1998.9	1992.4	1986.8	0.12	0.82	1.00	30.54	-16.0	-25.7	-26.5	1.24	0.11	-82.5	-106.9	-127.3	-147.5	60.7	-123.59
4.50	21.74	2009.8	2003.2	1997.6	0.11	0.87	1.05	30.64	-15.9	-26.3	-23.6	1.20	0.03	-83.8	-107.1	-128.0	-147.9	86.7	-127.92
5.00	22.10	2020.8	2014.1	2008.5	0.14	0.87	1.06	30.74	-15.9	-26.1	-21.0	1.16	0.10	-83.3	-107.3	-128.2	-148.1	100.0	-129.06
5.50	22.70	2031.9	2025.2	2019.5	0.21	0.92	1.07	30.82	-15.7	-26.5	-21.6	1.13	0.18	-83.3	-107.6	-128.2	-148.0	148.1	-132.48
6.00	23.37	2043.4	2036.5	2030.8	0.28	0.97	1.12	30.90	-15.4	-27.0	-23.5	1.09	0.21	-83.8	-108.1	-128.7	-148.4	177.0	-133.92
6.50	24.07	2055.2	2048.2	2042.4	0.35	1.04	1.20	30.99	-15.3	-27.6	-24.7	1.06	0.19	-83.6	-108.0	-129.0	-148.4	211.6	-135.49
7.00	24.71	2067.3	2060.2	2054.4	0.41	1.12	1.28	31.08	-15.2	-28.7	-26.3	1.02	0.12	-83.3	-108.3	-129.1	-148.6	302.4	-138.41
7.50	25.21	2079.7	2072.6	2066.7	0.47	1.15	1.34	31.17	-15.1	-29.3	-26.1	0.96	0.12	-84.0	-108.1	-129.3	-147.7	361.5	-139.86
8.00	25.46	2092.4	2085.2	2079.3	0.53	1.25	1.39	31.27	-15.1	-30.3	-27.2	0.84	0.19	-84.4	-109.3	-130.0	-149.1	507.5	-143.07
9.00	24.59	2118.1	2110.5	2104.6	0.69	1.34	1.49	31.46	-14.9	-32.6	-28.2	0.40	0.15	-83.3	-108.7	-130.2	-149.7	606.7	-144.54
10.00	21.80	2142.2	2134.5	2128.5	0.86	1.51	1.66	31.62	-14.3	-35.1	-29.4	0.27	0.06	-80.2	-106.6	-128.9	-148.9	851.6	-146.89
11.00	18.26	2163.3	2155.5	2149.5	0.99	1.67	1.82	31.75	-15.0	-35.6	-27.1	0.80	0.16	-77.8	-104.6	-127.3	-147.6	1000.0	-148.42

*at 25°C unless mentioned otherwise



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