

Coaxial

Voltage Controlled Oscillator

ZX95-1310C+

Ultra Low Noise 1260 to 1310 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- cellular Infrastructure



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-1310C-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.			Max.	Typ.	Max.
ZX95-1310C+	1260	1310	+3	-95	-120	-140	-159	0.5	20	2.5 - 5	40	120	-90	-25	-13	0.20	0.10	5	35

Maximum Ratings

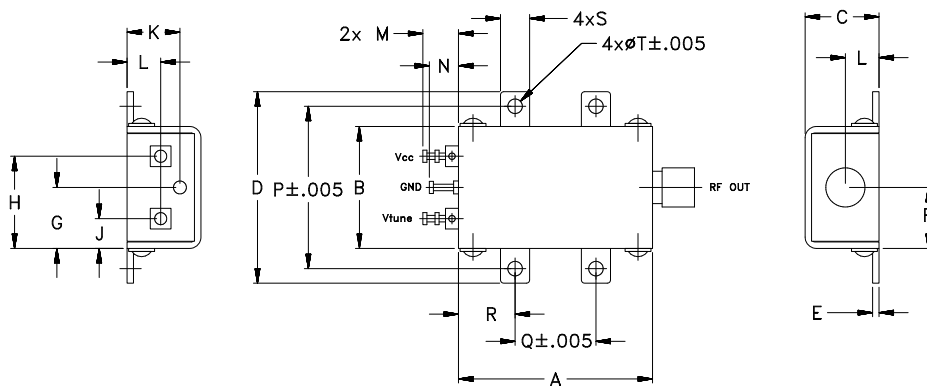
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	22V
All specifications	50 ohm system

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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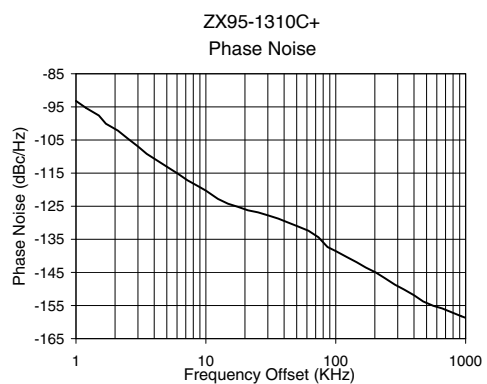
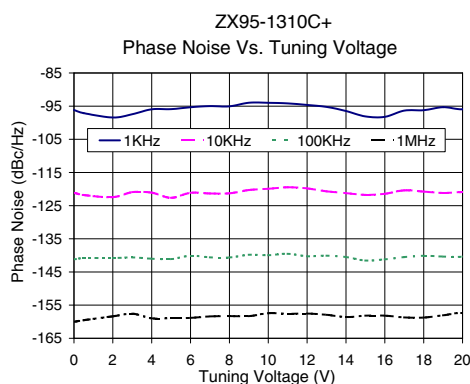
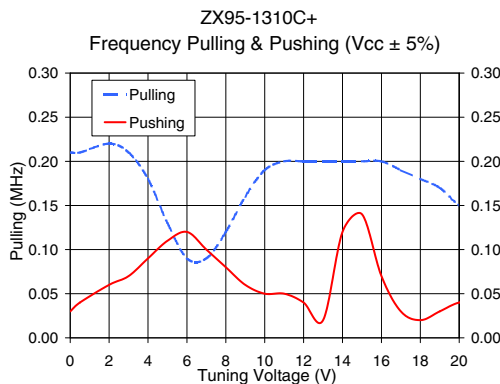
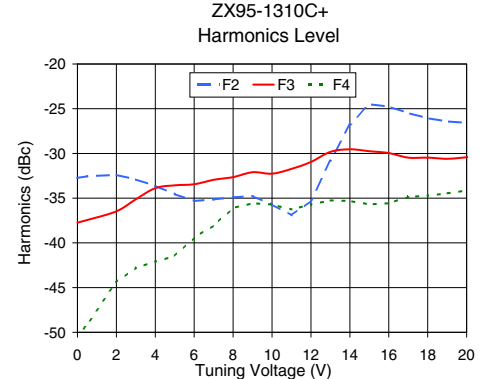
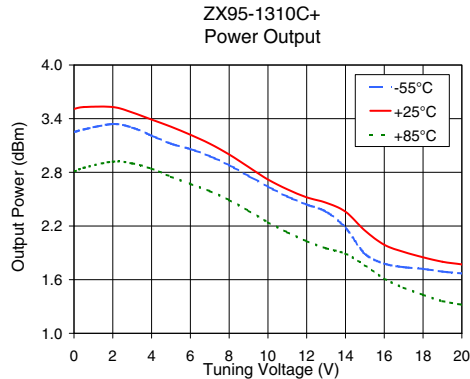
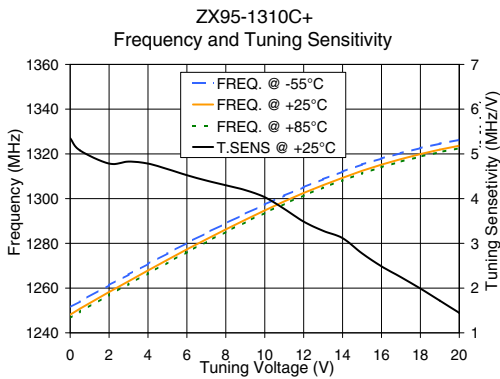
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ZX95-1310C+
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Performance Data & Curves*

ZX95-1310C+

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 1285 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	5.35	1251.4	1248.1	1246.6	3.25	3.51	2.81	28.90	-32.7	-37.7	-50.7	0.03	0.21	-96.2	-121.1	-141.2	-160.0	1.0	-95.11
0.50	5.08	1254.0	1250.8	1249.4	3.28	3.53	2.85	28.97	-32.6	-37.4	-49.1	0.04	0.21	-97.1	-121.8	-140.8	-159.6	2.1	-103.93
2.00	4.78	1261.3	1258.3	1257.0	3.34	3.53	2.92	29.12	-32.4	-36.5	-44.4	0.06	0.22	-98.4	-122.5	-140.8	-158.4	3.5	-109.70
3.00	4.83	1266.0	1263.0	1261.8	3.30	3.47	2.90	29.18	-32.9	-35.1	-42.8	0.07	0.21	-97.4	-120.9	-140.6	-157.6	6.1	-115.13
4.00	4.78	1270.8	1267.9	1266.6	3.21	3.39	2.84	29.22	-33.6	-33.9	-42.1	0.09	0.18	-96.0	-121.1	-141.0	-159.0	8.7	-119.20
5.00	4.66	1275.5	1272.7	1271.4	3.12	3.31	2.75	29.23	-34.5	-33.6	-41.5	0.11	0.13	-95.9	-122.6	-141.1	-158.9	10.0	-121.18
6.00	4.52	1280.2	1277.3	1276.1	3.06	3.22	2.67	29.22	-35.3	-33.4	-39.4	0.12	0.09	-95.3	-121.1	-140.1	-158.9	21.1	-127.16
7.00	4.40	1284.6	1281.8	1280.7	2.98	3.12	2.59	29.20	-35.1	-33.0	-38.1	0.10	0.09	-95.0	-121.3	-140.6	-158.4	36.1	-131.96
8.00	4.30	1289.0	1286.2	1285.1	2.88	3.00	2.49	29.18	-34.9	-32.7	-36.1	0.08	0.12	-95.1	-121.3	-140.6	-158.3	61.6	-136.57
9.00	4.19	1293.2	1290.5	1289.4	2.76	2.86	2.37	29.16	-34.8	-32.1	-35.6	0.06	0.16	-94.0	-120.3	-139.8	-158.3	86.4	-138.30
10.00	4.03	1297.3	1294.7	1293.6	2.64	2.72	2.24	29.14	-35.7	-32.3	-35.7	0.05	0.19	-94.0	-119.9	-139.9	-157.4	100.0	-139.91
11.00	3.77	1301.3	1298.8	1297.6	2.53	2.61	2.13	29.10	-36.9	-31.7	-36.3	0.05	0.20	-94.2	-119.4	-139.5	-157.6	145.0	-143.10
12.00	3.49	1305.1	1302.5	1301.4	2.44	2.52	2.03	29.05	-35.3	-31.0	-35.7	0.04	0.20	-94.7	-119.8	-140.3	-157.5	170.2	-143.21
13.00	3.28	1308.6	1306.0	1304.9	2.36	2.46	1.95	28.99	-30.8	-29.8	-35.3	0.02	0.20	-95.2	-120.7	-140.1	-157.9	203.5	-144.93
14.00	3.12	1312.1	1309.3	1308.2	2.18	2.36	1.89	28.98	-26.8	-29.5	-35.3	0.12	0.20	-96.5	-121.2	-140.5	-158.6	285.6	-145.61
15.00	2.78	1315.3	1312.4	1311.2	1.89	2.15	1.76	29.09	-24.5	-29.8	-35.7	0.14	0.20	-98.1	-121.7	-141.6	-158.2	335.4	-146.76
16.00	2.49	1317.9	1315.2	1314.0	1.78	1.99	1.61	29.18	-24.8	-30.0	-35.6	0.07	0.20	-98.2	-121.4	-141.2	-158.2	470.7	-151.55
17.00	2.24	1320.4	1317.7	1316.6	1.74	1.91	1.51	29.21	-25.5	-30.5	-34.9	0.03	0.19	-96.4	-120.4	-140.5	-158.7	562.6	-153.37
19.00	1.72	1324.6	1321.9	1320.8	1.69	1.80	1.36	29.22	-26.4	-30.6	-34.5	0.03	0.17	-95.3	-121.2	-140.4	-158.1	927.2	-158.42
20.00	1.45	1326.3	1323.6	1322.5	1.67	1.77	1.32	29.21	-26.6	-30.4	-34.1	0.04	0.15	-95.9	-120.9	-140.4	-157.4	1000.0	-158.50

*at 25°C unless mentioned otherwise



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