

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	Price	Qty.
SMA	ZX95-1310C-S+	\$51.95 ea.	(1-9)

+RoHS Compliant

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

Electrical Specifications

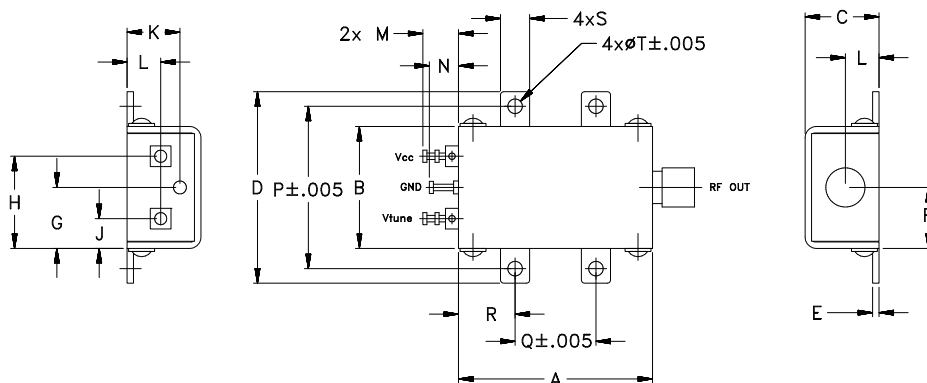
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies,kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
								VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Vcc (volts)						Current (mA)		
	Min.	Max.		Typ.	1	10	100	1000	Min.	Max.	Typ.	Typ.		Typ.	Typ.			Max.	Typ.	Typ.
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.

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

Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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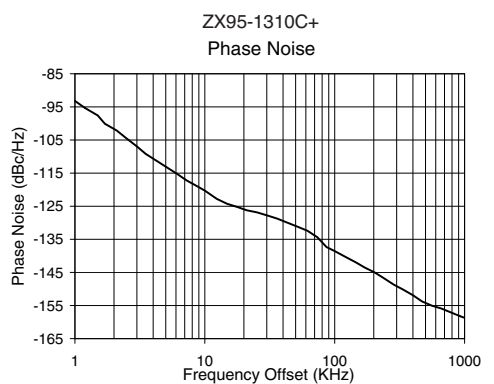
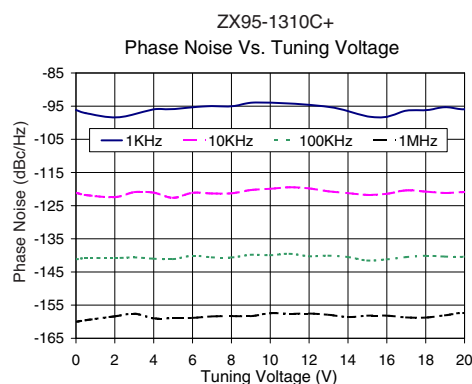
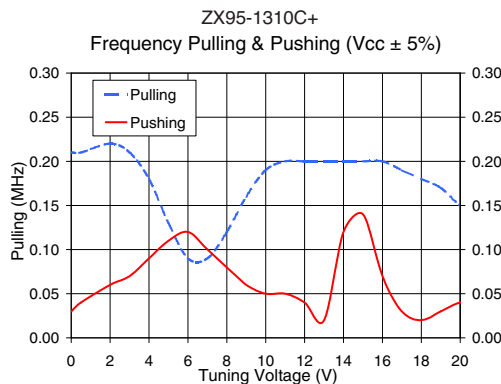
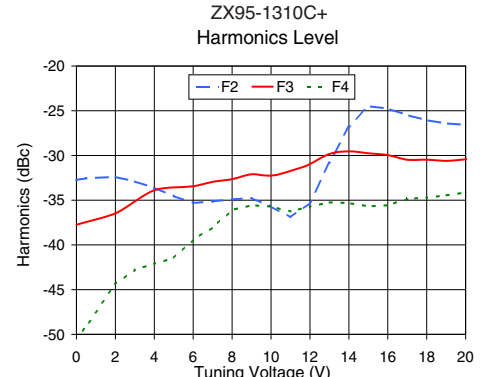
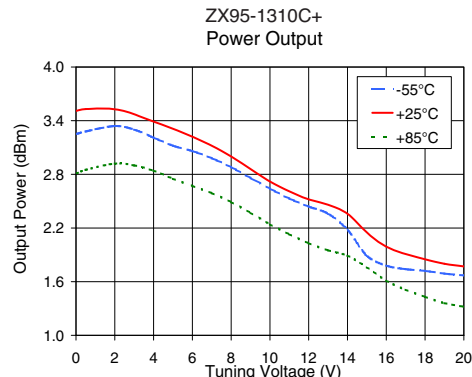
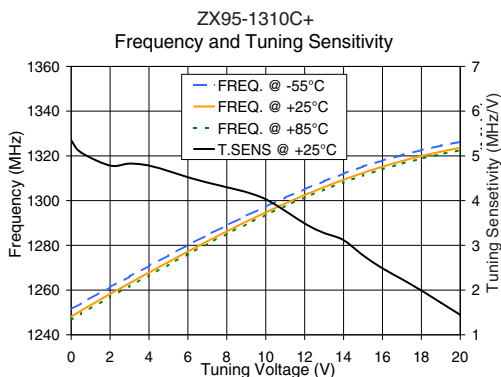
REV. B
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EDR-10925F2
ZX95-1310C+
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Performance Data & Curves*

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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