

Coaxial

Voltage Controlled Oscillator

ZX95-1570+

Linear Tuning 1250 to 1570 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- military radio



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-1570-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.	Typ.			Max.	Typ.	Typ.	Vcc (volts)	Current (mA)
ZX95-1570+	1250	1570	+3.5	-79	-105	-126	-146	2	20	26-38	55	35	-90	-18	-10	1.5	0.5	5	35			

Maximum Ratings

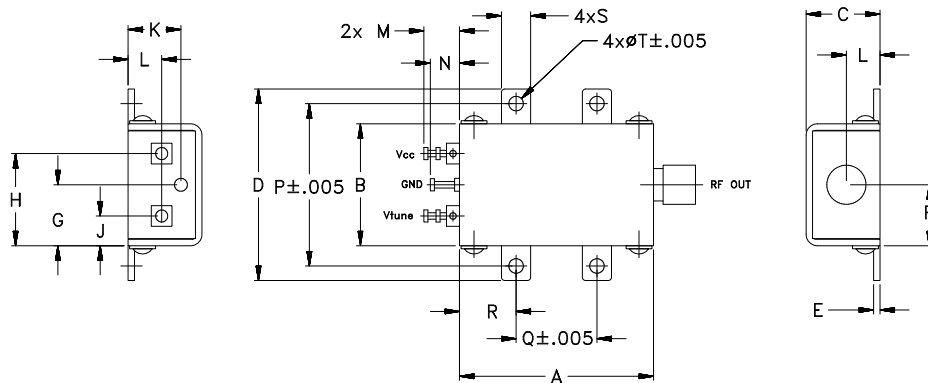
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	5.4V
Absolute Max. Tuning Voltage (Vtune)	22.0V
All specifications	50 ohm system

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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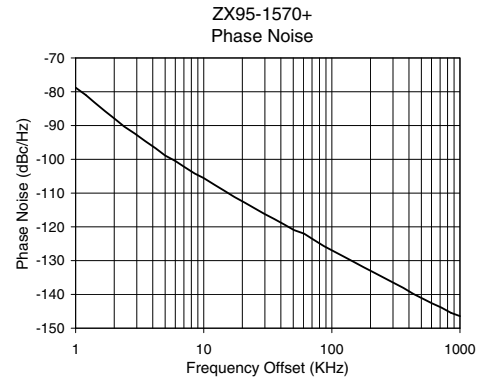
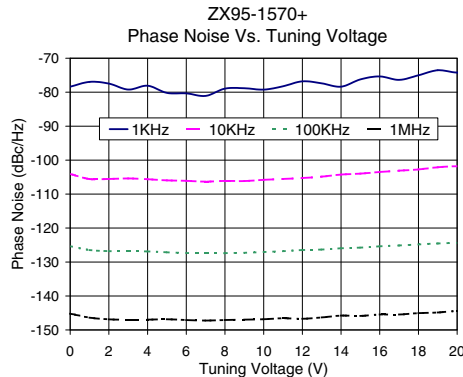
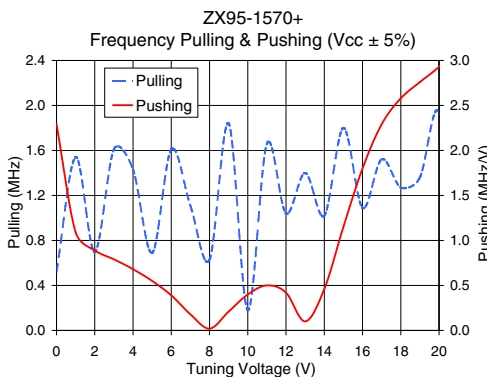
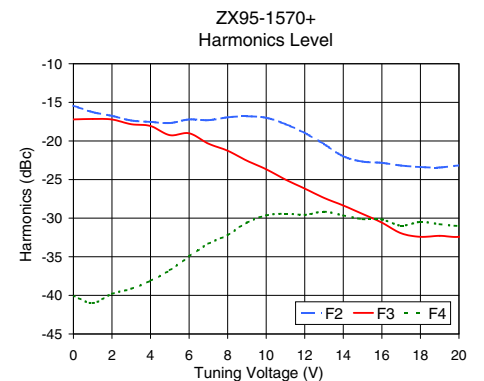
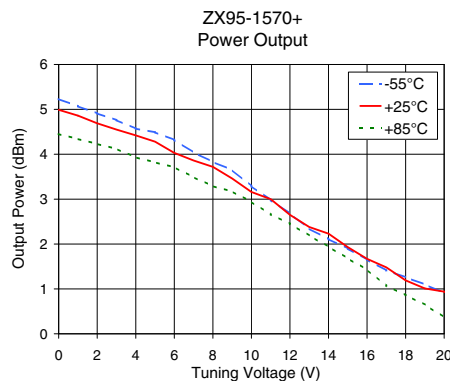
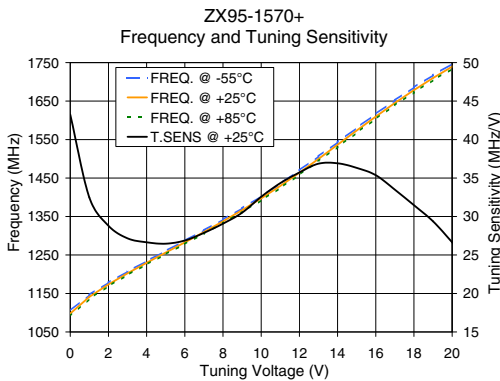
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Performance Data & Curves*

ZX95-1570+

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 1410 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	43.26	1105.2	1097.9	1091.0	5.23	4.99	4.45	29.05	-15.4	-17.2	-40.1	2.29	0.52	-78.4	-104.1	-125.3	-145.2	1.0	-78.78
2.00	28.80	1178.5	1173.6	1169.1	4.91	4.69	4.23	28.89	-16.8	-17.2	-39.8	0.89	0.70	-77.5	-105.6	-126.8	-146.9	2.0	-87.90
3.00	27.17	1207.0	1202.4	1198.1	4.76	4.55	4.12	28.84	-17.4	-17.8	-39.1	0.79	1.61	-79.2	-105.4	-126.9	-147.0	3.5	-94.63
4.00	26.65	1234.0	1229.6	1225.5	4.57	4.42	3.93	28.80	-17.5	-18.1	-38.1	0.68	1.43	-78.1	-105.6	-126.9	-147.0	6.0	-100.50
5.00	26.46	1260.5	1256.3	1252.0	4.49	4.28	3.82	28.79	-17.7	-19.3	-36.7	0.55	0.69	-80.2	-106.0	-127.1	-146.9	8.5	-104.20
6.00	26.88	1287.0	1282.7	1278.7	4.32	4.03	3.71	28.80	-17.2	-19.0	-34.9	0.39	1.61	-80.3	-106.1	-127.3	-147.1	10.0	-105.57
7.00	27.87	1314.0	1309.6	1305.5	4.04	3.86	3.49	28.80	-17.3	-20.3	-33.3	0.18	1.11	-81.1	-106.3	-127.5	-147.2	20.8	-112.79
8.00	29.07	1342.0	1337.5	1333.1	3.83	3.72	3.29	28.82	-16.9	-21.3	-32.2	0.02	0.63	-79.0	-106.1	-127.4	-147.1	35.5	-117.68
9.00	30.50	1371.5	1366.5	1361.9	3.65	3.46	3.17	28.85	-16.8	-22.6	-30.6	0.21	1.84	-78.8	-106.2	-127.3	-147.0	60.7	-122.01
10.00	32.56	1402.5	1397.0	1392.3	3.29	3.16	2.94	28.86	-17.0	-23.7	-29.6	0.40	0.18	-79.3	-105.8	-127.1	-146.9	86.7	-125.70
11.00	34.35	1435.4	1429.6	1424.4	2.98	3.00	2.66	28.86	-17.8	-25.0	-29.4	0.50	1.66	-78.3	-105.5	-126.8	-146.6	100.0	-126.95
12.00	35.72	1470.2	1463.9	1458.4	2.68	2.65	2.45	28.85	-19.0	-26.2	-29.6	0.42	1.04	-76.8	-105.3	-126.5	-146.7	148.1	-130.37
13.00	36.87	1506.4	1499.7	1494.0	2.34	2.38	2.19	28.81	-20.4	-27.4	-29.2	0.10	1.40	-77.4	-104.9	-126.3	-146.3	177.0	-131.95
14.00	36.91	1543.3	1536.5	1530.7	2.11	2.23	1.94	28.77	-22.0	-28.4	-29.6	0.46	1.02	-78.4	-104.3	-126.0	-145.8	211.6	-133.47
15.00	36.32	1580.4	1573.4	1567.6	1.90	1.93	1.68	28.72	-22.7	-29.5	-30.1	1.15	1.80	-76.2	-104.0	-125.8	-145.9	302.4	-136.54
16.00	35.38	1616.8	1609.8	1604.1	1.65	1.67	1.43	28.67	-22.8	-30.6	-30.2	1.80	1.09	-75.4	-103.5	-125.4	-145.5	361.5	-138.06
17.00	33.48	1652.1	1645.1	1639.3	1.41	1.48	1.07	28.61	-23.2	-32.0	-31.0	2.29	1.52	-76.4	-103.1	-125.1	-145.5	507.5	-141.17
18.00	31.47	1685.8	1678.6	1673.0	1.26	1.19	0.86	28.57	-23.4	-32.4	-30.5	2.58	1.27	-75.0	-102.7	-124.8	-145.1	606.7	-142.66
19.00	29.37	1717.4	1710.1	1704.5	1.10	1.01	0.65	28.53	-23.4	-32.3	-30.8	2.76	1.36	-73.5	-102.1	-124.5	-144.9	851.6	-145.46
20.00	26.65	1746.7	1739.5	1733.6	0.91	0.94	0.37	28.50	-23.2	-32.4	-31.0	2.93	1.94	-74.2	-101.8	-124.4	-144.4	1000.0	-146.43

*at 25°C unless mentioned otherwise



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