

Coaxial

Voltage Controlled Oscillator

ZX95-1700A+

Wide Band 950 to 1620 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 communications
- broadband wireless access

Connectors	Model
SMA	ZX95-1700A-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.
ZX95-1700A+	950	1620	+6	-72	-100	-123	-144	0.5	10	70-110	50	60	-90	-20	-11	0.2	0.5	10	30	

Maximum Ratings

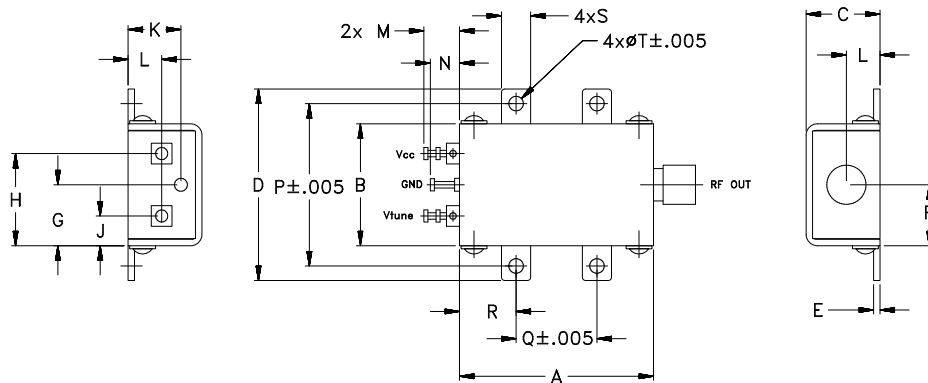
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	12V
Absolute Max. Tuning Voltage (Vtune)	12V
All specifications	50 ohm system

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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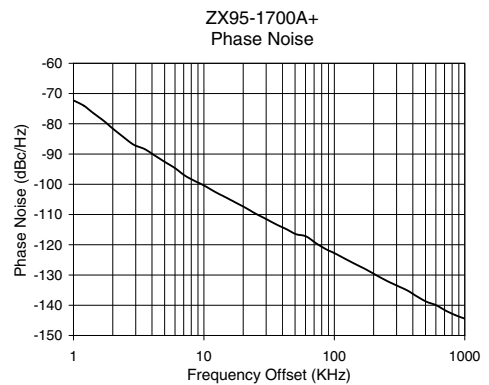
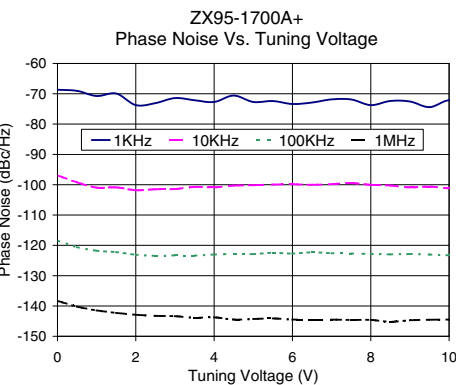
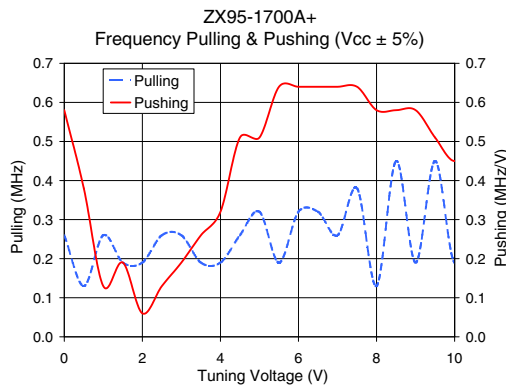
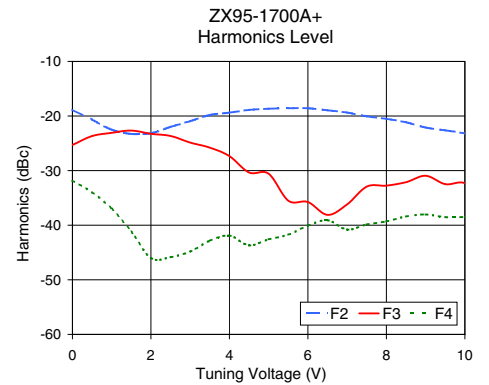
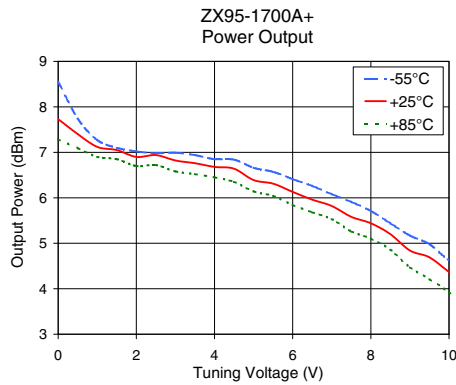
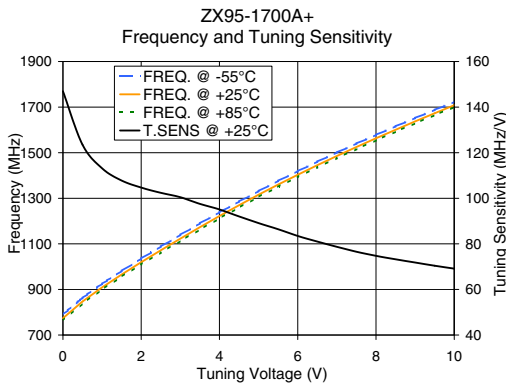
REV. A
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EDR-8510F3
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Performance Data & Curves*

ZX95-1700A+

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	146.94	790.1	773.7	763.1	8.55	7.73	7.29	24.52	-18.9	-25.3	-31.9	0.58	0.26	-68.7	-96.9	-118.4	-138.3	1.0	-72.26
0.50	123.52	862.6	847.2	838.0	7.74	7.40	7.09	24.60	-20.7	-23.7	-34.0	0.38	0.13	-69.0	-99.2	-120.6	-140.2	2.0	-81.59
1.00	113.15	924.4	908.9	899.8	7.27	7.12	6.90	24.66	-22.5	-23.1	-37.0	0.13	0.26	-70.7	-101.0	-121.8	-141.5	3.5	-88.34
1.50	107.78	981.2	965.5	956.2	7.10	7.05	6.85	24.71	-23.3	-22.7	-41.2	0.19	0.19	-69.9	-100.9	-122.2	-142.3	6.0	-94.66
2.00	104.70	1035.6	1019.4	1009.7	7.02	6.90	6.70	24.75	-23.2	-23.3	-46.0	0.06	0.19	-73.8	-101.8	-123.1	-142.9	8.5	-98.89
2.50	102.40	1088.4	1071.7	1061.8	6.98	6.94	6.72	24.78	-22.0	-23.7	-45.9	0.13	0.26	-73.1	-101.5	-123.5	-143.3	10.0	-100.38
3.00	100.48	1139.7	1122.9	1112.8	6.99	6.82	6.58	24.80	-21.0	-24.9	-44.8	0.19	0.26	-71.4	-101.4	-123.3	-143.4	20.8	-107.76
3.50	97.54	1189.8	1173.2	1162.9	6.94	6.76	6.52	24.80	-19.8	-25.8	-42.9	0.26	0.19	-72.1	-100.7	-123.4	-143.9	35.5	-113.18
4.00	95.10	1238.6	1222.0	1211.7	6.85	6.68	6.45	24.80	-19.4	-27.3	-41.9	0.32	0.19	-72.7	-100.9	-123.0	-143.8	60.7	-117.24
5.00	89.09	1331.6	1315.5	1305.5	6.66	6.39	6.14	24.76	-18.7	-30.6	-42.6	0.51	0.32	-72.7	-100.2	-122.9	-144.3	86.7	-121.51
5.50	86.40	1376.1	1360.1	1350.2	6.57	6.31	6.04	24.72	-18.6	-35.5	-41.7	0.64	0.19	-72.4	-99.9	-122.4	-144.1	100.0	-122.75
6.00	83.46	1418.9	1403.3	1393.5	6.41	6.13	5.84	24.69	-18.6	-35.8	-40.1	0.64	0.32	-73.4	-99.9	-122.7	-144.5	148.1	-126.60
6.50	81.02	1460.5	1445.0	1435.5	6.26	5.96	5.68	24.65	-19.0	-38.1	-39.1	0.64	0.32	-72.9	-100.0	-122.3	-144.5	177.0	-128.29
7.00	78.72	1500.8	1485.5	1476.2	6.08	5.82	5.53	24.61	-19.4	-36.2	-40.8	0.64	0.26	-71.9	-99.8	-122.6	-144.5	211.6	-130.16
7.50	76.54	1540.0	1524.9	1515.6	5.91	5.58	5.26	24.56	-20.1	-32.9	-39.9	0.64	0.38	-71.9	-99.5	-122.7	-144.6	302.4	-133.53
8.00	74.75	1578.2	1563.1	1554.2	5.71	5.44	5.10	24.52	-20.5	-32.8	-39.3	0.58	0.13	-73.7	-100.0	-122.8	-144.6	361.5	-135.08
8.50	73.22	1615.4	1600.5	1591.7	5.44	5.20	4.86	24.48	-21.2	-32.1	-38.4	0.58	0.45	-72.4	-100.3	-123.0	-145.2	507.5	-138.83
9.00	71.81	1652.0	1637.1	1628.5	5.17	4.84	4.47	24.44	-22.1	-31.0	-38.0	0.58	0.19	-72.5	-100.9	-122.9	-144.7	606.7	-140.03
9.50	70.40	1687.7	1673.0	1664.7	4.98	4.69	4.21	24.40	-22.6	-32.5	-38.5	0.51	0.45	-74.4	-100.6	-123.0	-144.5	851.6	-143.31
10.00	69.12	1722.7	1708.2	1700.1	4.63	4.37	3.92	24.37	-23.2	-32.3	-38.5	0.45	0.19	-72.1	-101.2	-123.3	-144.5	1000.0	-144.42

*at 25°C unless mentioned otherwise



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