

Coaxial

Voltage Controlled Oscillator

ZX95-1740+

Linear Tuning 1250 to 1740 MHz

Features

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

Applications

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



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-1740-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)		PORT SENSITIVITY (MHz/V)	CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.	Max.	Vcc (volts)	Current (mA)
	Typ.								Min.	Max.													
ZX95-1740+	1250	1740	+8	-78	-105	-126	-146	0.5	20	21-33	40	50	-90	-19	-	4	0.4	8	30				

Maximum Ratings

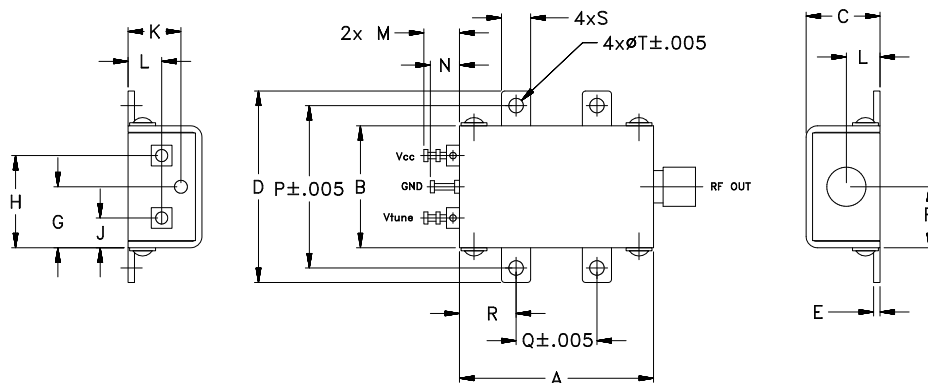
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	9V
Absolute Max. Tuning Voltage (Vtune)	22V
All specifications	50 ohm system

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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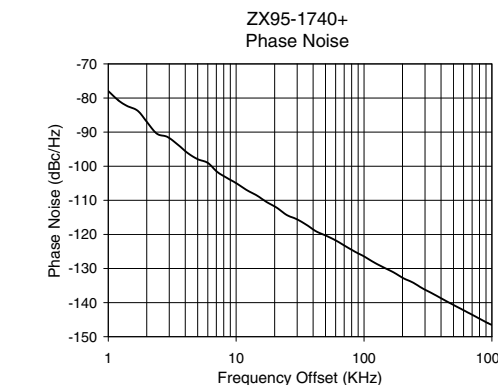
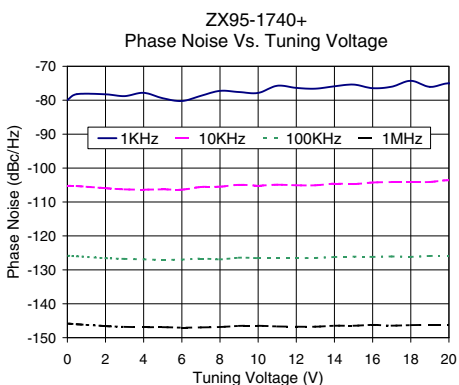
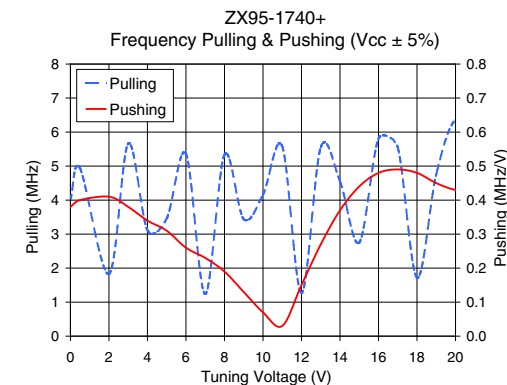
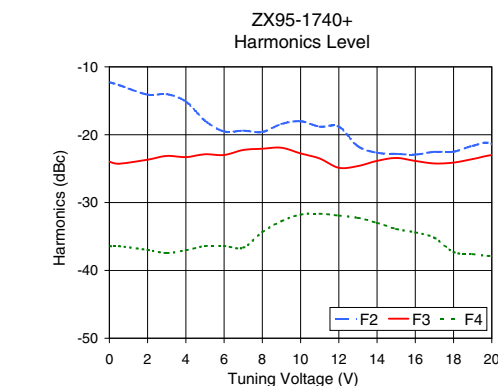
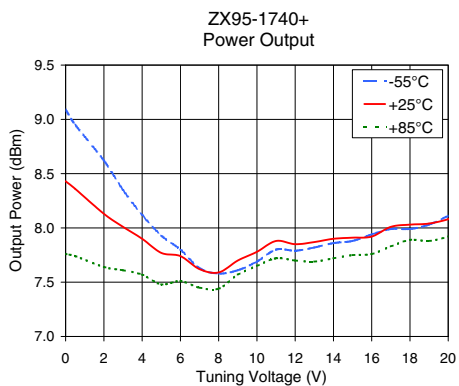
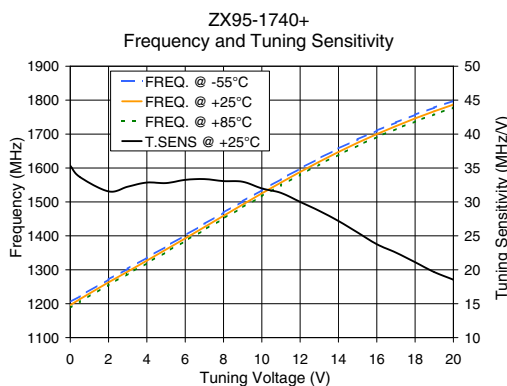
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ZX95-1740+
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Performance Data & Curves*

ZX95-1740+

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 1500 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	35.33	1204.9	1195.7	1187.4	9.09	8.43	7.76	23.04	-12.3	-24.0	-36.5	0.38	4.02	-79.9	-105.2	-125.8	-145.8	1.0	-77.96
2.00	31.55	1271.5	1263.1	1255.9	8.62	8.13	7.64	23.06	-14.1	-23.7	-37.0	0.41	1.83	-78.3	-105.9	-126.6	-146.6	2.0	-86.96
3.00	32.24	1303.2	1294.6	1287.4	8.35	8.01	7.61	23.06	-14.0	-23.1	-37.4	0.38	5.66	-78.8	-106.3	-126.8	-146.8	3.5	-93.68
4.00	32.85	1335.7	1326.9	1319.5	8.12	7.90	7.57	23.04	-15.1	-23.3	-37.0	0.34	3.12	-77.8	-106.4	-126.9	-146.9	6.0	-99.03
5.00	32.78	1368.6	1359.7	1352.3	7.93	7.77	7.48	23.04	-17.9	-22.9	-36.4	0.31	3.46	-79.4	-106.3	-127.1	-146.9	8.5	-103.47
6.00	33.25	1401.6	1392.5	1384.9	7.80	7.74	7.51	23.04	-19.5	-23.0	-36.4	0.26	5.36	-80.2	-106.4	-127.0	-147.0	10.0	-104.95
7.00	33.36	1435.0	1425.8	1418.0	7.63	7.62	7.45	23.03	-19.4	-22.3	-36.7	0.23	1.24	-78.7	-105.6	-126.7	-147.0	20.8	-112.18
8.00	33.06	1468.5	1459.1	1451.2	7.58	7.59	7.44	23.03	-19.6	-22.1	-34.4	0.19	5.33	-77.2	-105.5	-126.9	-146.9	35.5	-117.20
9.00	32.97	1501.8	1492.2	1484.2	7.61	7.70	7.57	23.02	-18.4	-21.9	-32.7	0.13	3.44	-77.6	-104.9	-126.4	-146.5	60.7	-121.85
10.00	31.99	1534.9	1525.2	1517.0	7.69	7.78	7.65	23.02	-18.0	-22.8	-31.8	0.07	4.16	-77.8	-105.2	-126.6	-146.5	86.7	-125.27
11.00	31.33	1567.0	1557.1	1549.0	7.80	7.88	7.72	23.02	-18.8	-23.5	-31.7	0.03	5.58	-75.7	-104.9	-126.5	-146.7	100.0	-126.46
12.00	30.00	1598.4	1588.5	1580.3	7.79	7.85	7.70	23.02	-18.8	-24.9	-31.9	0.15	1.27	-76.4	-105.1	-126.6	-146.8	145.5	-129.87
13.00	28.68	1628.4	1618.5	1610.3	7.82	7.87	7.69	23.03	-21.7	-24.6	-32.3	0.27	5.55	-76.6	-105.1	-126.5	-146.8	170.8	-131.15
14.00	27.19	1657.2	1647.1	1638.9	7.86	7.90	7.72	23.03	-22.7	-23.9	-33.0	0.37	4.55	-75.9	-104.6	-126.2	-146.5	204.2	-132.89
15.00	25.48	1684.5	1674.3	1665.9	7.88	7.91	7.75	23.03	-22.8	-23.4	-33.9	0.44	2.75	-75.4	-104.7	-126.1	-146.5	286.7	-135.83
16.00	23.76	1710.1	1699.8	1691.4	7.94	7.92	7.76	23.03	-22.9	-23.9	-34.4	0.48	5.81	-76.5	-104.3	-126.2	-146.2	336.6	-137.17
17.00	22.53	1734.2	1723.6	1715.0	7.99	8.01	7.83	23.02	-22.5	-24.2	-35.2	0.49	5.55	-76.0	-104.1	-126.1	-146.5	472.5	-140.17
18.00	21.11	1756.9	1746.1	1737.2	7.99	8.03	7.89	23.01	-22.5	-24.1	-37.3	0.48	1.72	-74.3	-104.1	-126.2	-146.3	564.9	-141.72
19.00	19.66	1778.1	1767.2	1758.3	8.03	8.04	7.88	23.01	-21.7	-23.6	-37.6	0.45	4.76	-76.1	-104.1	-125.9	-146.2	931.1	-146.01
20.00	18.53	1798.0	1786.9	1777.8	8.11	8.08	7.92	23.00	-21.4	-23.0	-37.9	0.43	6.35	-75.0	-103.6	-125.9	-146.2	1000.0	-146.55

*at 25°C unless mentioned otherwise



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