

Coaxial

Voltage Controlled Oscillator

ZX95-1624+

Linear Tuning 1400 to 1624 MHz

Features

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



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communication
- WiMAX

Connectors	Model
SMA	ZX95-1624-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 TIVITY (MHz/V)	CAP MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.	Typ.	Vcc (volts)	Current (mA)
									Min.	Max.												
ZX95-1624+	1400	1624	+1	-78	-103	-124	-144	0.5	9.5	29-35	39	40	-90	-18	-10	1.5	1.2	5	40			

Maximum Ratings

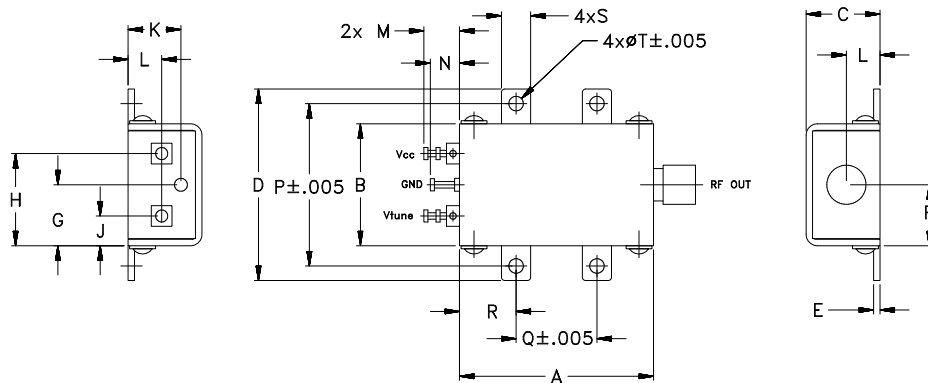
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	11.5V
All specifications	50 ohm system

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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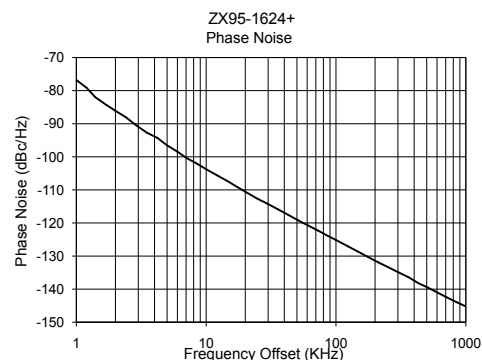
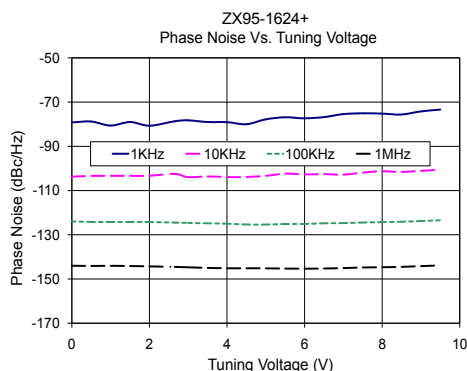
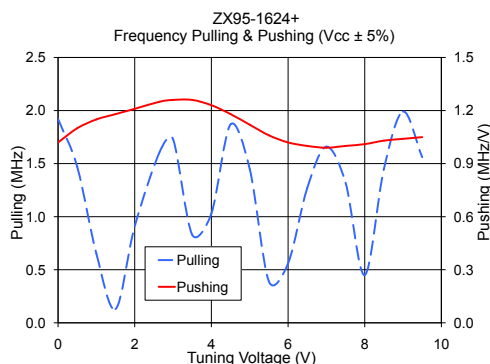
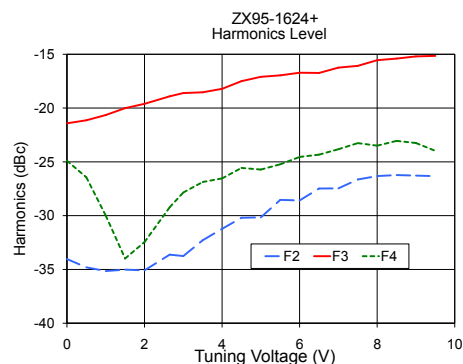
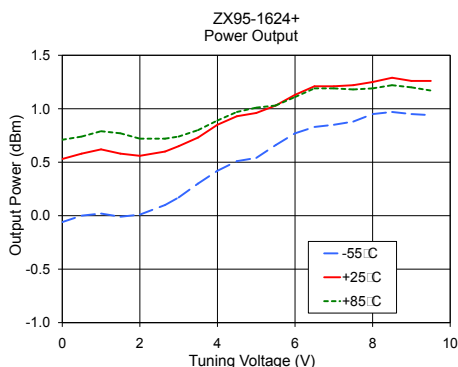
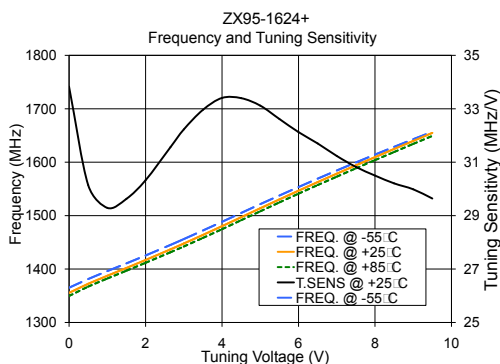


Performance Data & Curves*

ZX95-1624+

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 1512 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	33.83	1365.1	1355.5	1349.6	-0.06	0.53	0.71	26.64	-34.0	-21.4	-24.9	1.02	1.92	-79.18	-103.7	-124.0	-144.0	1.0	-76.80
0.50	30.15	1381.3	1372.4	1367.2	0.00	0.58	0.74	26.72	-34.8	-21.1	-26.4	1.10	1.47	-78.77	-103.4	-124.2	-144.1	2.0	-86.12
1.00	29.29	1396.2	1387.5	1382.3	0.02	0.62	0.79	26.79	-35.2	-20.7	-30.0	1.15	0.65	-80.62	-103.3	-124.2	-144.0	3.5	-92.75
1.50	29.63	1410.7	1402.1	1397.0	-0.01	0.58	0.77	26.87	-35.0	-20.0	-34.0	1.18	0.13	-79.00	-103.3	-124.2	-144.1	6.0	-98.45
2.00	30.32	1425.4	1416.9	1411.7	0.01	0.56	0.72	26.99	-35.1	-19.6	-32.5	1.21	0.91	-80.66	-103.3	-124.2	-144.3	8.5	-102.09
2.65	31.56	1445.2	1436.8	1431.4	0.10	0.60	0.72	27.16	-33.6	-18.9	-29.2	1.25	1.61	-78.66	-102.5	-124.5	-144.5	10.0	-103.76
3.00	32.23	1456.1	1447.7	1442.3	0.17	0.65	0.74	27.26	-33.8	-18.6	-27.9	1.26	1.73	-78.24	-103.9	-124.6	-144.7	20.8	-110.94
3.50	32.96	1472.2	1463.8	1458.3	0.30	0.73	0.80	27.40	-32.3	-18.5	-26.9	1.26	0.83	-78.99	-103.6	-124.8	-145.0	35.5	-115.81
4.00	33.41	1488.5	1480.3	1474.7	0.42	0.85	0.89	27.53	-31.2	-18.2	-26.5	1.23	1.03	-79.07	-103.9	-125.0	-145.1	60.7	-120.72
4.50	33.40	1505.0	1497.0	1491.4	0.51	0.93	0.97	27.67	-30.2	-17.5	-25.6	1.18	1.87	-80.00	-103.8	-125.4	-145.1	86.7	-123.92
5.00	33.12	1521.4	1513.7	1508.1	0.54	0.96	1.01	27.80	-30.2	-17.1	-25.7	1.12	1.45	-77.78	-103.3	-125.4	-145.2	100.0	-125.15
5.50	32.62	1537.6	1530.3	1524.7	0.66	1.03	1.03	27.95	-28.5	-17.0	-25.2	1.06	0.39	-76.86	-102.3	-125.1	-145.3	148.1	-128.67
6.00	32.13	1553.5	1546.6	1541.0	0.77	1.13	1.11	28.07	-28.6	-16.7	-24.6	1.02	0.56	-77.32	-102.7	-125.1	-145.3	177.0	-130.31
6.50	31.70	1569.1	1562.6	1557.1	0.83	1.21	1.19	28.17	-27.5	-16.7	-24.3	1.00	1.27	-76.79	-102.6	-124.8	-145.3	211.6	-131.90
7.00	31.23	1584.5	1578.5	1572.9	0.85	1.21	1.19	28.28	-27.5	-16.2	-23.8	0.99	1.66	-75.43	-102.8	-124.7	-145.0	302.4	-134.92
7.50	30.82	1599.6	1594.1	1588.6	0.88	1.22	1.18	28.36	-26.6	-16.1	-23.3	1.00	1.32	-75.05	-101.9	-124.5	-144.8	361.5	-136.37
8.00	30.50	1614.3	1609.5	1603.9	0.95	1.25	1.19	28.45	-26.3	-15.6	-23.5	1.01	0.45	-75.19	-101.3	-124.3	-144.7	507.5	-139.48
8.50	30.21	1628.8	1624.8	1619.1	0.97	1.29	1.22	28.53	-26.2	-15.4	-23.1	1.03	1.45	-75.59	-101.6	-124.1	-144.5	606.7	-141.06
9.00	29.99	1643.0	1639.9	1634.2	0.95	1.26	1.20	28.61	-26.3	-15.2	-23.3	1.04	1.99	-74.19	-101.1	-123.8	-144.2	851.6	-143.97
9.50	29.64	1657.0	1654.9	1649.2	0.94	1.26	1.17	28.69	-26.3	-15.2	-24.0	1.05	1.56	-73.39	-100.6	-123.4	-143.8	1000.0	-145.22

*at 25°C unless mentioned otherwise



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