

Coaxial

# Voltage Controlled Oscillator

## ZX95-2260W+

Wide Band 1290 to 2260 MHz

### Features

- wide band frequency range
- high power output, +9.2 dBm typ.
- low phase noise
- low pulling
- low pushing
- protected by US patent 6,790,049

### Applications

- r & d
- lab
- instrumentation
- digital TV / UHF band
- radar receiver
- satellite systems



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2260W-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)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.
ZX95-2260W+	1290	2260	+9.2	-74	-100	-121	-141	0.5	20	48-79	60	35	-90	-20	-10	1.5	1.8	5	45

### Maximum Ratings

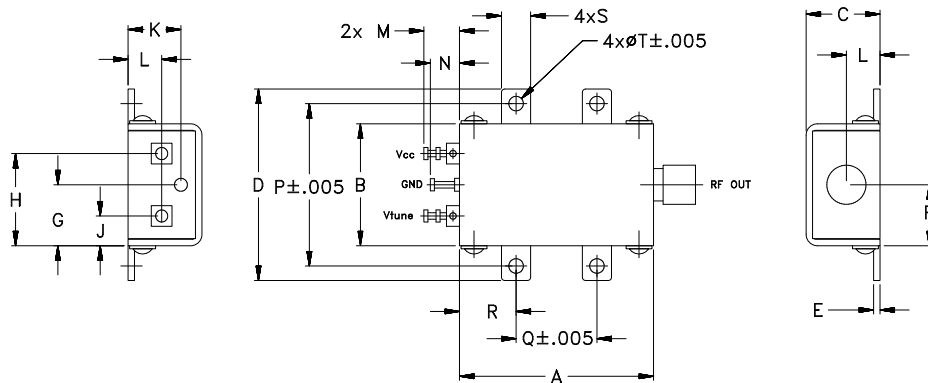
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	22V
All specifications	50 ohm system

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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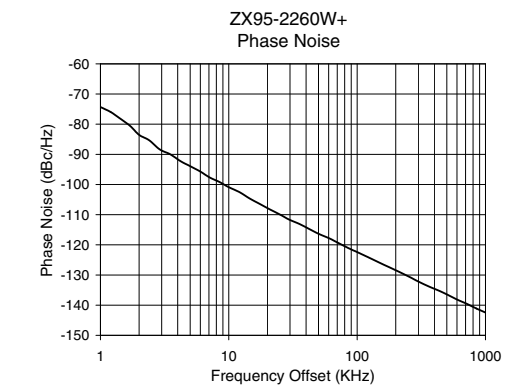
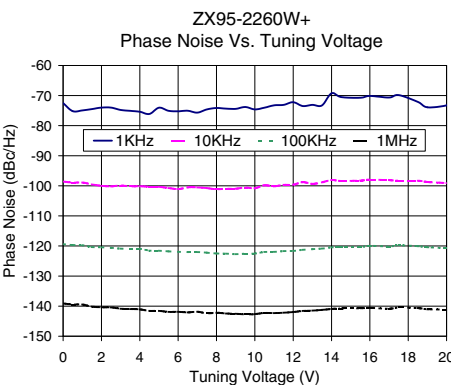
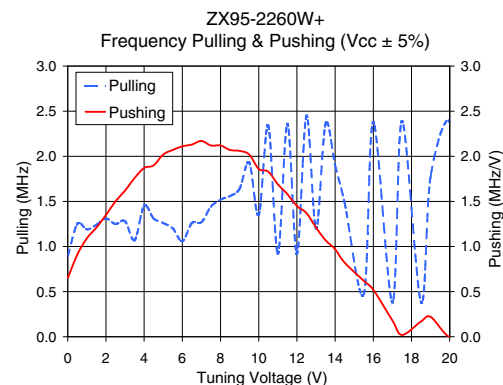
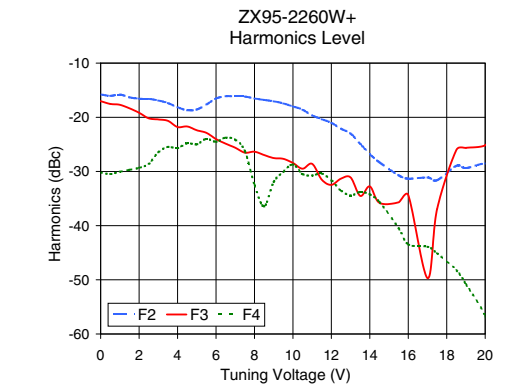
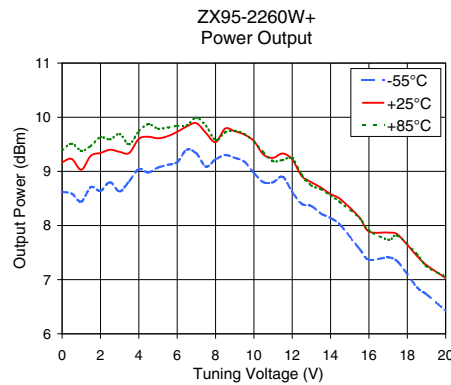
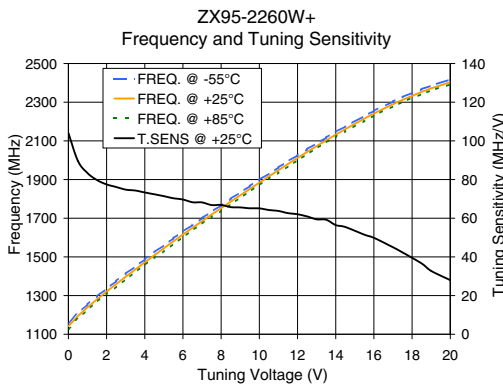
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# Performance Data & Curves\*

# ZX95-2260W+

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 1775 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	104.10	1159.4	1142.3	1128.0	8.62	9.17	9.39	35.14	-15.8	-17.0	-30.2	0.65	0.89	-72.5	-98.6	-119.4	-139.1	1.0	-74.33
0.50	89.61	1210.0	1194.3	1181.5	8.59	9.23	9.51	35.33	-16.1	-17.5	-30.5	0.91	1.25	-75.2	-98.9	-119.7	-139.5	2.0	-83.53
1.00	83.37	1254.6	1239.1	1226.2	8.44	9.03	9.38	35.49	-15.8	-17.7	-30.0	1.09	1.19	-74.9	-98.9	-119.8	-139.5	3.5	-89.99
1.50	79.70	1296.3	1280.8	1267.9	8.71	9.29	9.47	35.65	-16.3	-18.4	-29.7	1.21	1.24	-74.5	-99.5	-120.4	-140.2	6.0	-95.71
2.00	77.47	1336.1	1320.7	1307.5	8.64	9.34	9.63	35.82	-16.6	-19.2	-29.3	1.35	1.31	-74.0	-100.0	-120.4	-140.4	8.5	-99.21
3.00	74.79	1413.0	1397.5	1384.1	8.63	9.36	9.69	36.14	-16.9	-20.4	-26.5	1.62	1.28	-74.8	-99.9	-120.9	-140.9	10.0	-100.89
4.00	73.31	1488.0	1472.0	1458.5	9.04	9.60	9.74	36.39	-18.1	-21.8	-25.7	1.87	1.45	-75.4	-100.1	-121.0	-141.1	20.8	-108.20
6.00	69.69	1631.3	1615.8	1602.2	9.17	9.73	9.84	36.81	-16.5	-24.0	-24.5	2.11	1.06	-75.2	-101.1	-121.9	-141.9	35.5	-113.09
7.00	68.17	1700.3	1684.8	1671.4	9.33	9.89	9.99	36.85	-16.2	-25.6	-24.1	2.17	1.27	-75.7	-100.5	-122.0	-141.9	60.7	-117.83
8.00	66.89	1767.4	1752.2	1739.0	9.22	9.54	9.58	36.83	-16.5	-26.4	-32.5	2.12	1.52	-74.1	-101.2	-122.5	-142.2	86.7	-121.20
8.50	65.74	1800.6	1785.7	1772.8	9.30	9.79	9.72	36.78	-16.8	-27.0	-36.4	2.07	1.56	-74.3	-101.0	-122.6	-142.4	100.0	-122.40
9.00	65.57	1833.4	1818.6	1805.9	9.25	9.74	9.75	36.78	-17.0	-27.5	-32.0	2.06	1.64	-74.4	-101.0	-122.7	-142.5	148.1	-125.84
10.00	65.10	1898.6	1883.9	1871.7	8.97	9.56	9.55	36.61	-18.0	-28.4	-28.7	1.86	1.35	-74.6	-100.8	-122.5	-142.7	177.0	-127.37
12.00	62.06	2026.0	2011.8	2000.0	8.62	9.22	9.24	36.34	-21.0	-32.5	-31.7	1.45	0.92	-72.2	-99.6	-121.7	-142.0	211.6	-128.92
14.00	56.44	2146.4	2132.6	2121.1	8.14	8.58	8.55	36.13	-26.8	-32.8	-34.2	0.97	1.90	-69.2	-98.1	-120.5	-140.9	302.4	-132.25
15.50	51.50	2229.1	2215.5	2204.2	7.57	8.15	8.14	36.00	-30.7	-35.7	-40.5	0.62	0.47	-70.7	-98.3	-120.3	-140.7	361.5	-133.78
16.00	49.89	2255.2	2241.2	2230.2	7.37	7.89	7.91	35.93	-31.3	-34.4	-43.5	0.52	2.38	-70.1	-97.9	-119.9	-140.6	507.5	-136.56
17.00	44.98	2303.6	2289.8	2278.8	7.41	7.87	7.74	35.86	-31.1	-49.7	-43.9	0.18	0.38	-70.6	-98.1	-120.2	-140.9	606.7	-138.22
18.50	36.60	2367.5	2353.4	2342.0	6.86	7.44	7.47	35.71	-29.0	-26.0	-48.3	0.17	0.38	-72.1	-98.3	-120.1	-140.6	851.6	-141.12
20.00	27.96	2417.9	2403.4	2392.2	6.43	7.03	7.05	35.61	-28.5	-25.2	-56.7	0.00	2.38	-73.3	-99.1	-120.7	-141.1	1000.0	-142.45

\*at 25°C unless mentioned otherwise



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