

Coaxial

Voltage Controlled Oscillator

ZX95-2500W+

Wide Band 1000 to 2400 MHz

Features

- very wide band frequency range
- low phase noise
- low pushing
- low pulling
- protected by US patent 6,790,049

Applications

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



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2500W-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.	Typ.	Vcc (volts)	Current (mA)
ZX95-2500W+	1000	2400	+3.5	-65	-93	-116	-138	0.5	25	40-96	65	20	-90	-13	-	0.3	4.5	5	48			

Maximum Ratings

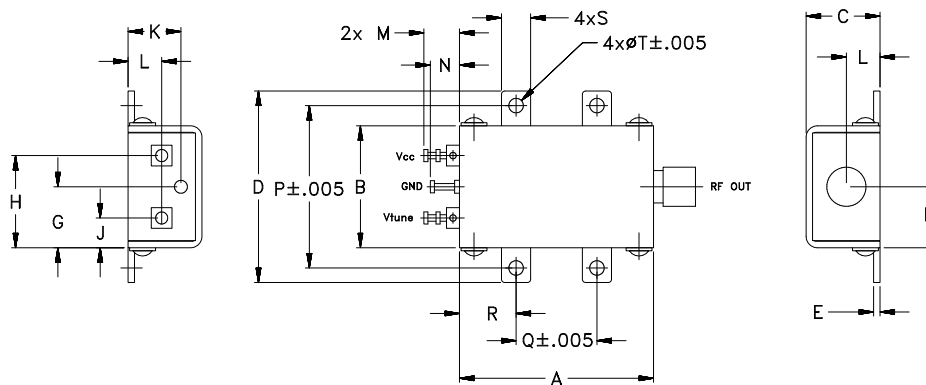
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	27V
All specifications	50 ohm system

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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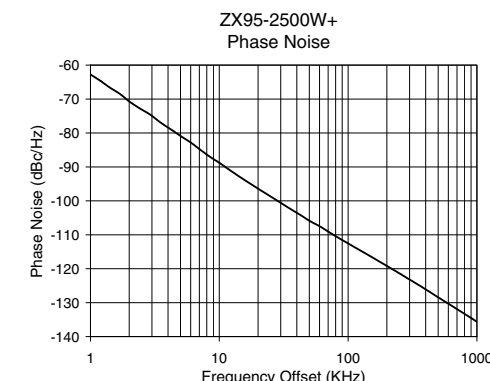
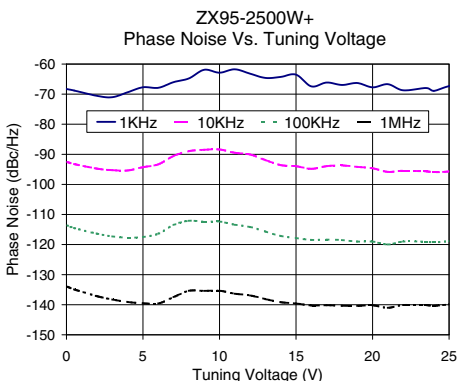
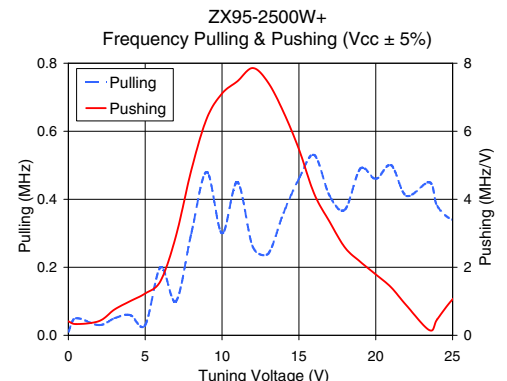
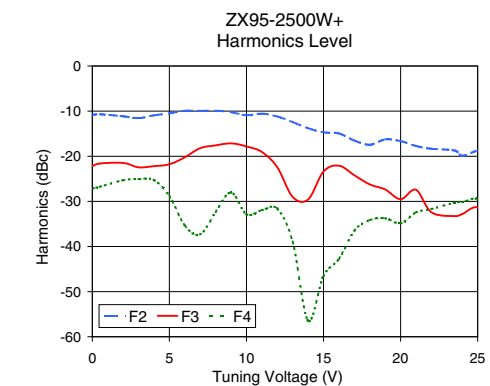
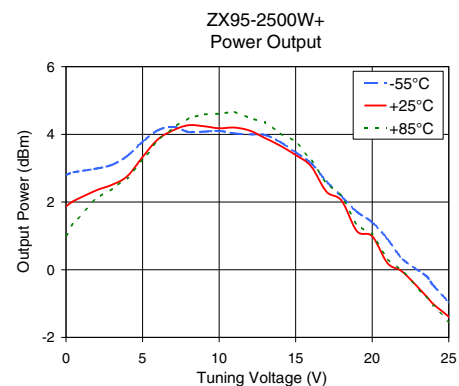
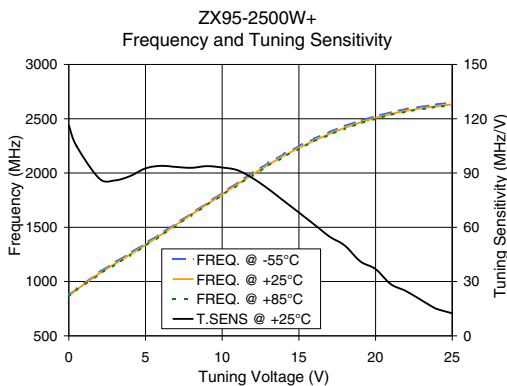
REV. A
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ZX95-2500W+
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Performance Data & Curves*

ZX95-2500W+

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 1700 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	116.32	875.2	867.1	859.1	2.80	1.87	1.01	36.86	-10.9	-22.2	-27.2	0.41	0.01	-68.3	-92.5	-113.6	-133.9	1.0	-62.76
0.50	104.94	933.6	925.3	917.9	2.88	2.03	1.39	37.15	-10.7	-21.6	-26.8	0.33	0.05	-68.8	-93.2	-114.5	-134.9	2.0	-70.70
2.00	86.83	1087.6	1077.0	1069.6	2.99	2.35	2.11	38.04	-11.1	-21.5	-25.3	0.42	0.03	-70.6	-94.8	-116.4	-137.2	3.5	-76.91
3.00	85.89	1175.9	1163.8	1155.9	3.10	2.51	2.39	38.72	-11.6	-22.5	-25.1	0.76	0.05	-71.0	-95.3	-117.3	-138.3	6.0	-82.81
4.00	88.33	1262.4	1249.7	1241.4	3.36	2.76	2.71	39.45	-10.9	-22.2	-25.3	1.00	0.06	-69.4	-95.4	-117.7	-139.1	8.5	-87.06
6.00	93.94	1443.8	1430.6	1421.7	4.12	3.85	3.82	40.74	-9.9	-20.2	-35.4	1.60	0.20	-67.9	-93.3	-116.4	-139.6	10.0	-88.78
8.00	92.86	1629.0	1617.9	1610.6	4.07	4.27	4.48	40.71	-9.9	-17.6	-32.4	4.86	0.30	-64.8	-89.0	-112.1	-135.4	20.8	-96.83
9.00	93.77	1723.5	1710.8	1703.5	4.08	4.24	4.59	39.97	-10.2	-17.2	-28.0	6.37	0.48	-61.9	-88.5	-112.4	-135.4	35.5	-102.35
10.00	93.03	1818.4	1804.5	1796.4	4.10	4.18	4.61	39.15	-10.9	-17.8	-32.9	7.11	0.30	-62.9	-88.4	-112.4	-135.3	60.7	-107.58
12.00	87.05	2005.2	1989.1	1979.3	4.00	4.11	4.48	37.88	-11.2	-22.5	-31.6	7.86	0.26	-63.2	-90.1	-114.2	-136.9	85.2	-111.02
13.00	81.25	2092.8	2076.1	2066.4	3.98	3.89	4.36	37.46	-12.4	-29.0	-38.9	7.43	0.24	-64.6	-91.9	-115.7	-138.1	100.0	-112.55
14.00	74.68	2174.1	2157.4	2147.5	3.77	3.66	4.03	37.17	-13.8	-29.6	-56.5	6.56	0.36	-64.3	-93.6	-117.2	-139.2	142.9	-115.93
15.00	68.14	2248.8	2232.1	2222.6	3.47	3.39	3.79	36.95	-14.7	-23.4	-46.5	5.47	0.46	-63.5	-93.9	-117.8	-139.6	167.8	-117.46
16.00	61.56	2316.9	2300.2	2291.2	3.15	3.06	3.24	36.79	-14.9	-22.1	-42.8	4.16	0.53	-67.4	-94.8	-118.5	-140.2	200.6	-119.22
18.00	49.83	2433.6	2416.7	2408.2	2.16	2.04	2.18	36.61	-17.5	-26.2	-34.1	2.58	0.37	-66.9	-93.7	-118.5	-140.3	281.6	-122.55
19.00	41.20	2481.8	2466.5	2457.6	1.71	1.14	1.32	36.56	-16.3	-27.4	-33.7	2.16	0.49	-66.3	-94.2	-119.0	-140.4	330.7	-124.15
20.00	36.89	2523.7	2507.7	2499.4	1.40	0.99	1.04	36.49	-16.6	-29.5	-34.9	1.79	0.46	-67.7	-94.6	-119.0	-140.2	464.2	-127.63
22.00	24.62	2590.5	2573.1	2565.2	0.31	-0.07	-0.06	36.42	-18.3	-32.4	-31.7	0.88	0.41	-68.7	-95.5	-119.0	-140.1	554.9	-129.50
24.00	14.85	2632.6	2617.0	2609.2	-0.47	-1.02	-1.06	36.37	-19.9	-32.8	-30.2	0.47	0.38	-68.9	-95.9	-119.3	-140.4	914.6	-134.69
25.00	12.50	2648.6	2631.9	2624.3	-0.95	-1.39	-1.53	36.33	-18.8	-31.4	-29.5	1.06	0.34	-67.3	-95.7	-118.9	-139.9	1000.0	-135.63

*at 25°C unless mentioned otherwise



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