

Coaxial

# Voltage Controlled Oscillator

## ZX95-2360W+

Wide Band 1430 to 2360 MHz

### Features

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



CASE STYLE: GB956

### Applications

- r & d
- lab
- instrumentation
- wireless communications
- signal analyzer

Connectors	Model	Price	Qty.
SMA	ZX95-2360W-S+	\$49.95 ea.	(1-9)

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

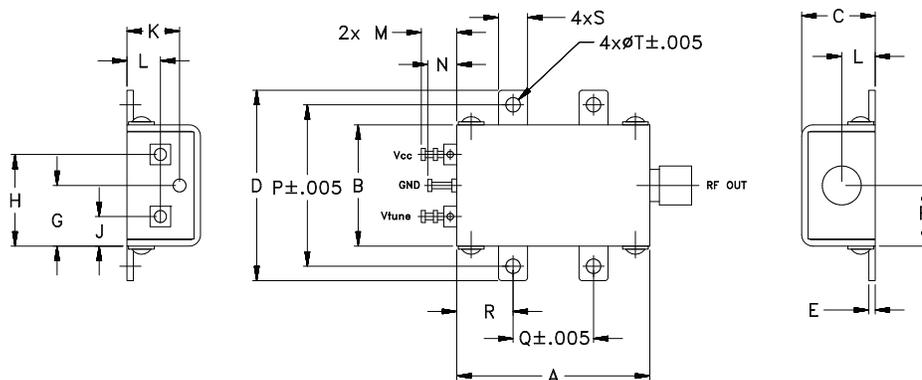
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies,kHz				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.
ZX95-2360W+	1430	2360	+8.5	-73	-100	-122	-142	0.5	20	51-70	65	95	-90	-20	-10	7	0.5	5	35

### 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.

### 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



For detailed performance specs & shopping online see web site

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**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

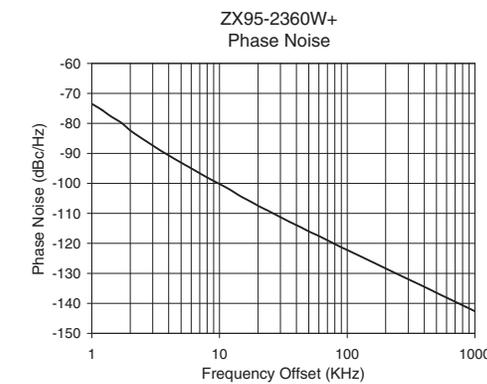
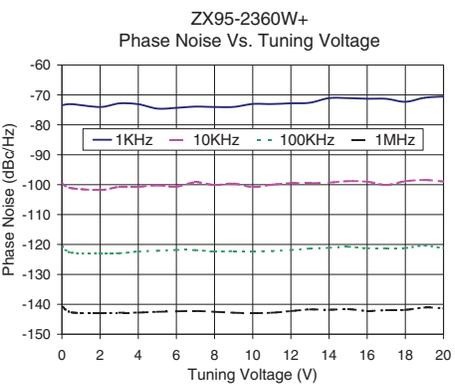
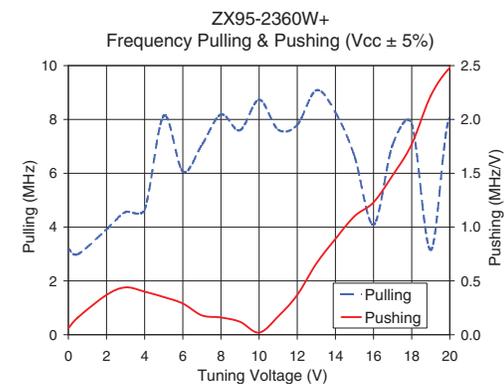
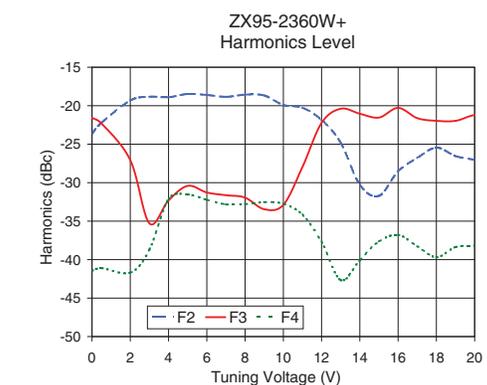
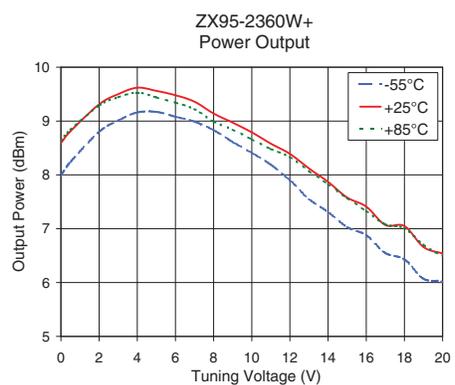
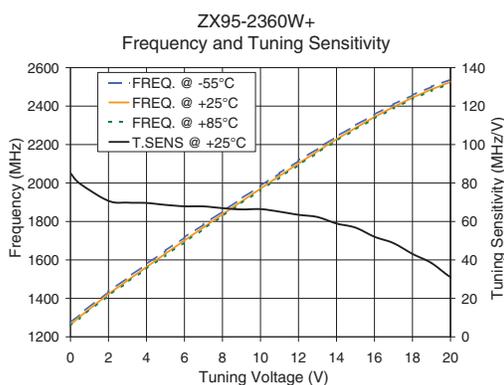
REV. A  
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EDR-8997F2  
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121028  
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# Performance Data & Curves\*

# ZX95-2360W+

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 1895 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	85.09	1274.1	1263.2	1257.1	7.99	8.59	8.64	27.15	-23.6	-21.6	-41.4	0.06	3.19	-73.4	-99.7	-120.6	-140.7	1.0	-73.47
0.50	79.69	1317.1	1305.7	1299.2	8.24	8.81	8.84	27.41	-22.2	-22.3	-41.1	0.16	2.99	-73.1	-101.2	-122.8	-142.7	2.0	-82.34
2.00	70.73	1435.7	1422.5	1414.4	8.80	9.31	9.29	27.98	-19.3	-27.1	-41.7	0.37	3.91	-74.0	-101.8	-122.9	-143.0	3.5	-89.21
3.00	69.82	1507.8	1493.3	1484.3	9.01	9.50	9.44	28.17	-18.8	-35.3	-38.7	0.44	4.56	-72.8	-100.8	-122.9	-142.8	6.0	-94.97
4.00	69.64	1578.1	1563.1	1553.7	9.16	9.62	9.53	28.30	-18.9	-32.3	-32.1	0.40	4.66	-73.1	-100.7	-122.4	-142.8	8.5	-98.62
5.00	68.62	1648.0	1632.7	1623.4	9.17	9.56	9.44	28.33	-18.5	-30.4	-31.5	0.35	8.13	-74.6	-100.2	-122.1	-142.5	10.0	-100.18
6.00	67.89	1717.1	1701.3	1692.0	9.08	9.48	9.34	28.25	-18.6	-31.3	-32.2	0.29	6.07	-74.3	-100.7	-121.8	-142.4	20.8	-107.81
7.00	67.85	1784.6	1769.2	1760.3	8.99	9.36	9.22	28.19	-18.9	-31.6	-32.8	0.18	7.05	-73.9	-99.2	-121.9	-142.3	35.5	-112.86
8.00	66.91	1852.0	1837.1	1828.5	8.83	9.14	8.99	28.13	-18.6	-31.9	-32.8	0.16	8.18	-74.0	-100.1	-122.4	-142.5	60.7	-117.63
9.00	66.29	1918.8	1904.0	1895.3	8.61	8.97	8.84	27.98	-18.7	-33.5	-32.5	0.12	7.60	-74.0	-99.6	-122.2	-142.8	86.7	-120.98
10.00	66.44	1984.6	1970.3	1962.1	8.41	8.79	8.66	27.93	-19.9	-32.9	-32.7	0.02	8.73	-73.0	-100.8	-122.3	-142.9	100.0	-122.23
11.00	65.09	2050.6	2036.7	2028.7	8.19	8.58	8.48	27.87	-20.3	-28.0	-34.2	0.17	7.62	-73.1	-100.0	-122.2	-142.8	148.1	-125.70
12.00	63.47	2115.9	2101.8	2093.7	7.90	8.39	8.33	27.74	-21.9	-22.2	-37.7	0.37	7.80	-72.8	-99.5	-121.8	-142.3	177.0	-127.26
13.00	62.31	2179.2	2165.3	2157.4	7.55	8.12	8.07	27.69	-24.8	-20.4	-42.7	0.66	9.08	-72.6	-99.5	-121.4	-141.7	211.6	-128.88
14.00	58.95	2241.1	2227.6	2219.6	7.31	7.87	7.83	27.65	-30.3	-21.0	-40.1	0.89	8.26	-71.1	-99.3	-121.1	-141.8	302.4	-132.01
15.00	56.79	2300.0	2286.5	2278.7	7.03	7.58	7.57	27.58	-31.7	-21.5	-37.6	1.10	6.63	-71.1	-98.8	-120.8	-141.6	361.5	-133.55
16.00	52.08	2356.0	2343.3	2335.6	6.88	7.41	7.33	27.58	-28.5	-20.3	-36.8	1.23	4.09	-71.3	-99.0	-121.3	-142.2	507.5	-136.61
17.00	48.73	2408.8	2395.4	2387.6	6.55	7.07	7.08	27.46	-26.8	-21.6	-38.3	1.48	7.05	-71.3	-100.1	-121.3	-142.0	606.7	-138.19
18.00	43.12	2456.6	2444.1	2436.7	6.43	7.05	7.01	27.54	-25.5	-22.0	-39.7	1.77	7.83	-72.3	-98.9	-121.2	-141.9	851.6	-141.19
20.00	31.06	2538.4	2525.6	2517.8	6.01	6.54	6.50	27.49	-27.0	-21.2	-38.2	2.48	8.04	-70.5	-98.9	-121.2	-141.3	1000.0	-142.65

\*at 25°C unless mentioned otherwise



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