

Coaxial

Voltage Controlled Oscillator

ZX95-2510+

5V Tuning for PLL IC's 2300 to 2510 MHz

Features

- Low phase noise
- Low pulling
- Low pushing
- Protected by US patent 6,790,049



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-2510-S+	\$ 44.95 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Applications

- R & D
- LAB
- Instrumentation
- Wireless communications
- WiMAX 2.5GHz

Electrical Specifications

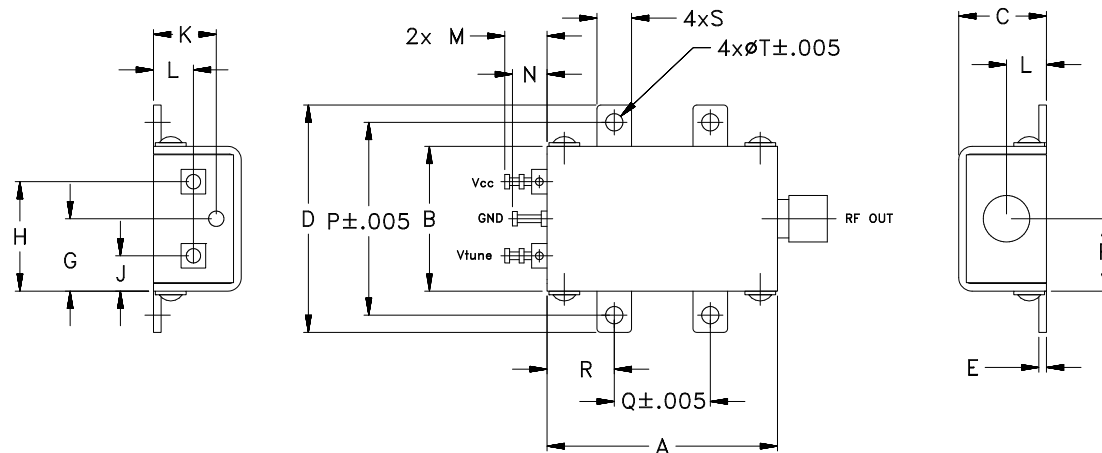
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.
ZX95-2510+	2300	2510	+4	-69	-96	-118	-138	0.5	5	85-103	40	35	-90	-18	-10	0.8	1	5	40

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)	7V
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	.45	.57	.18	.33	.21	.22	.18	1.00	.50	.35	.18	.106	GRAM
30.48	19.05	11.68	29.97	1.02	9.65	11.43	14.48	4.57	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0

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IF/RF MICROWAVE COMPONENTS

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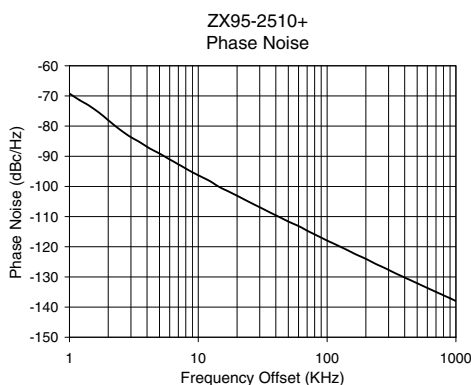
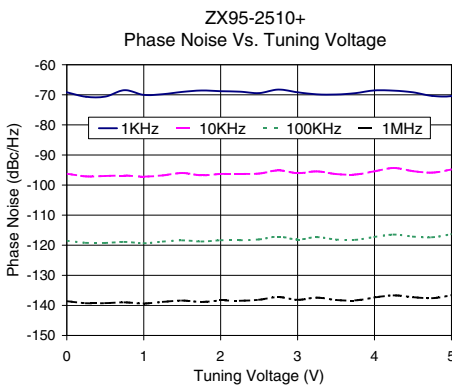
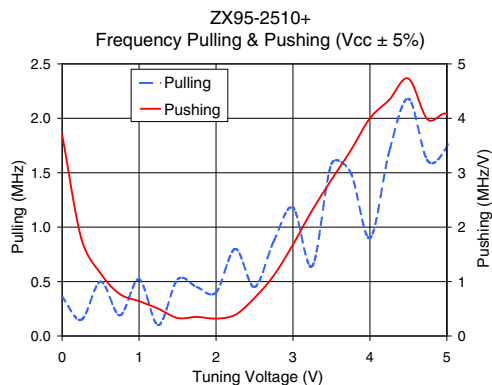
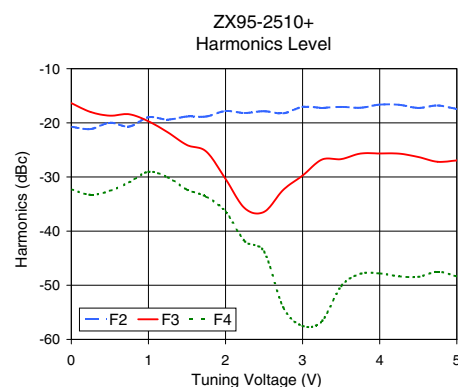
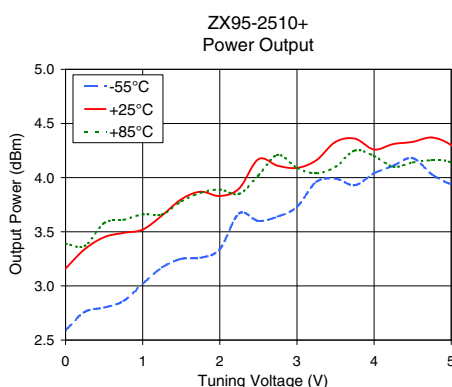
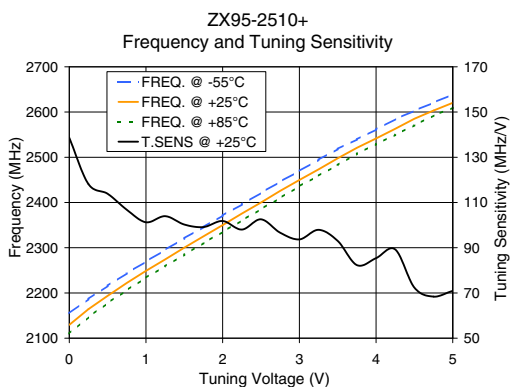
REV. OR
M122533
EDR-9463F2
ZX95-2510+
RAV
090805
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Performance Data & Curves*

ZX95-2510+

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 2405 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	138.62	2155.0	2129.5	2110.1	2.59	3.16	3.39	32.59	-20.7	-16.4	-32.3	3.70	0.36	-69.2	-96.2	-118.5	-138.6	1.0	-69.22
0.50	113.85	2216.0	2193.7	2177.7	2.80	3.45	3.58	32.72	-20.0	-18.7	-32.6	1.15	0.50	-70.6	-97.0	-119.2	-139.3	2.0	-78.04
0.75	106.77	2243.7	2222.2	2205.9	2.86	3.49	3.61	32.69	-20.7	-18.4	-31.0	0.77	0.19	-68.5	-96.8	-118.9	-139.0	3.5	-85.27
1.00	101.26	2269.4	2248.9	2233.7	3.02	3.52	3.66	32.74	-19.0	-19.7	-29.1	0.64	0.52	-70.0	-97.2	-119.4	-139.4	6.0	-91.04
1.25	103.96	2295.5	2274.2	2259.2	3.17	3.65	3.66	32.69	-19.4	-21.7	-30.1	0.50	0.10	-69.8	-96.8	-118.8	-138.8	8.5	-94.71
1.50	100.26	2320.9	2300.2	2284.5	3.25	3.80	3.78	32.61	-18.8	-24.1	-32.3	0.33	0.52	-69.0	-96.0	-118.4	-138.4	10.0	-96.30
1.75	99.13	2345.6	2325.3	2310.5	3.26	3.87	3.86	32.62	-18.8	-25.3	-33.6	0.35	0.45	-68.6	-96.7	-118.8	-138.9	20.8	-103.44
2.00	101.80	2371.1	2350.1	2335.1	3.34	3.83	3.89	32.54	-17.8	-30.4	-36.4	0.32	0.40	-68.8	-96.3	-118.3	-138.4	35.5	-108.50
2.25	98.02	2395.8	2375.5	2360.3	3.67	3.90	3.85	32.47	-18.2	-35.8	-41.9	0.39	0.80	-69.0	-96.3	-118.4	-138.5	60.7	-113.24
2.50	102.57	2421.3	2400.0	2385.4	3.60	4.17	4.02	32.38	-17.9	-36.4	-43.8	0.70	0.45	-69.4	-96.2	-118.1	-138.1	85.2	-116.48
2.75	96.65	2446.1	2425.6	2410.0	3.64	4.11	4.21	32.29	-18.2	-32.4	-54.1	1.11	0.87	-68.2	-95.1	-117.1	-137.2	100.0	-117.94
3.00	93.70	2469.8	2449.8	2436.0	3.73	4.09	4.09	32.27	-17.1	-29.7	-57.5	1.68	1.18	-69.2	-96.1	-118.1	-138.2	142.9	-121.06
3.25	97.94	2494.4	2473.2	2459.1	3.96	4.16	4.04	32.14	-17.2	-26.8	-56.6	2.31	0.64	-69.8	-95.5	-117.3	-137.4	167.8	-122.56
3.50	93.02	2518.3	2497.7	2482.7	3.99	4.33	4.10	31.98	-17.1	-26.7	-50.2	2.87	1.58	-69.9	-96.3	-118.1	-138.2	200.6	-124.04
3.75	82.31	2539.4	2521.0	2507.8	3.93	4.36	4.25	32.01	-17.2	-25.7	-47.9	3.41	1.50	-69.5	-96.5	-118.2	-138.4	281.6	-127.09
4.00	85.38	2561.3	2541.6	2528.9	4.04	4.26	4.20	31.92	-16.6	-25.7	-47.8	4.00	0.90	-68.5	-95.4	-117.3	-137.4	330.7	-128.56
4.25	89.27	2584.2	2562.9	2549.6	4.11	4.31	4.10	31.78	-16.7	-25.7	-48.4	4.34	1.69	-68.6	-94.3	-116.5	-137.6	464.2	-131.46
4.50	72.37	2602.8	2585.2	2570.7	4.18	4.33	4.14	31.66	-17.3	-26.3	-48.5	4.73	2.18	-69.2	-95.4	-117.1	-137.3	554.9	-132.99
4.75	68.40	2620.7	2603.3	2592.2	4.03	4.37	4.16	31.65	-16.8	-27.2	-47.5	3.98	1.61	-70.4	-95.9	-117.4	-137.6	914.6	-137.22
5.00	70.90	2638.9	2620.4	2609.2	3.94	4.30	4.14	31.55	-17.4	-26.9	-48.3	4.08	1.74	-70.4	-94.8	-116.4	-136.6	1000.0	-138.00

*at 25°C unless mentioned otherwise



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