

Coaxial

Voltage Controlled Oscillator

ZX95-2390+

5V Tuning for PLL IC's 2320 to 2390 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- defense communications & radar
- satellite digital audio radio service
- cellular infrastructure WCDMA



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-2390-S+	\$44.95 ea.	(1-9)

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

Electrical Specifications

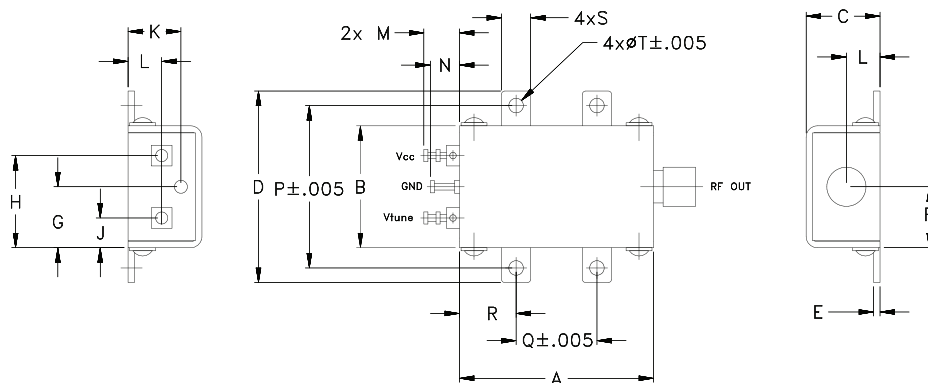
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, KHz				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Max.	Vcc (volts)	Current (mA)
ZX95-2390+	2320	2390	+4.5	-81	-106	-127	-147	0.5	5	31 - 35	20	180	-90	-17	-	1	0.2	5	43

Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6.2V
Absolute Max. Tuning Voltage (Vtune)	7.0V
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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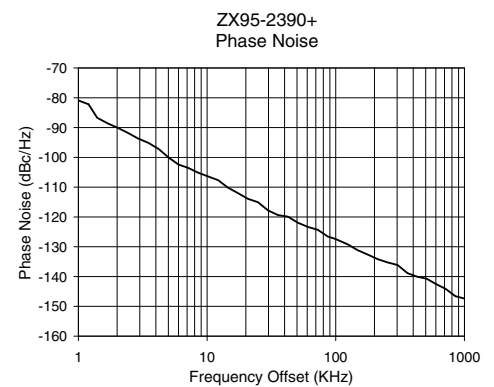
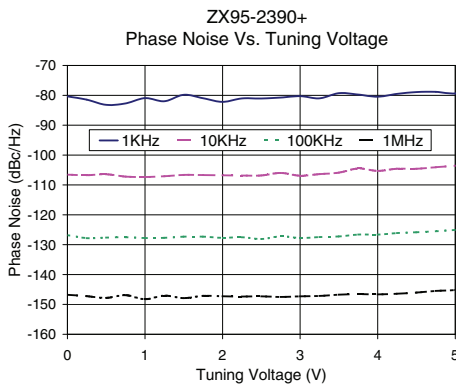
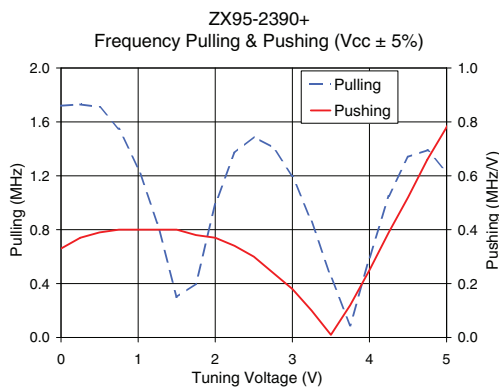
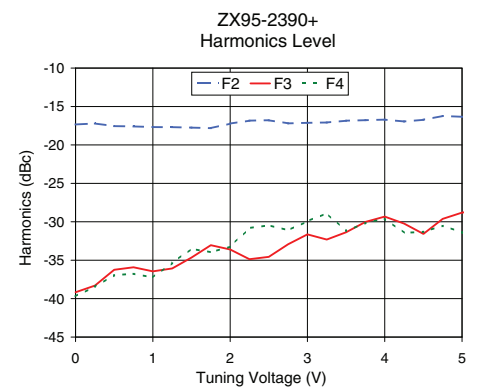
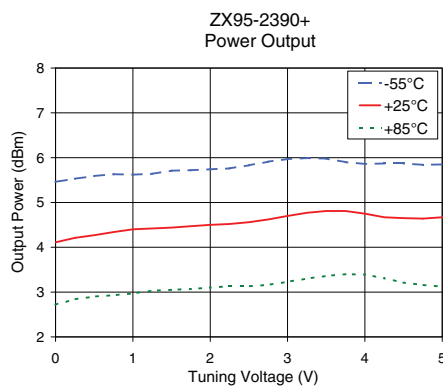
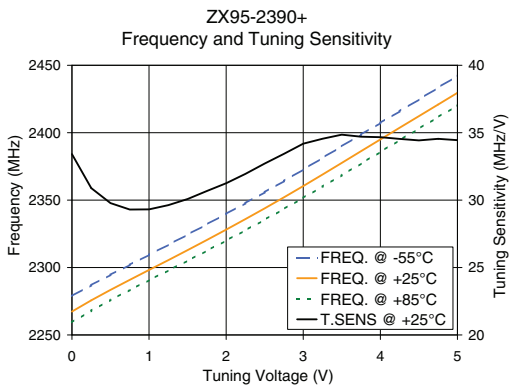
REV. OR
M111586
EDR-8288F2
ZX95-2390+
RAV
120904
Page 1 of 2

Performance Data & Curves*

ZX95-2390+

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 2355 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	33.41	2278.9	2267.3	2259.4	5.46	4.11	2.72	35.53	-17.3	-39.2	-39.7	0.33	1.72	-80.4	-106.6	-126.8	-146.8	1.0	-80.89
0.50	29.78	2294.6	2283.4	2275.9	5.59	4.27	2.90	35.62	-17.6	-36.2	-37.0	0.39	1.71	-83.2	-106.4	-127.6	-147.8	2.0	-90.01
0.75	29.30	2302.0	2290.8	2283.4	5.63	4.34	2.93	35.66	-17.6	-35.9	-36.8	0.40	1.55	-82.7	-107.2	-127.5	-146.9	3.5	-95.13
1.00	29.31	2309.4	2298.2	2290.6	5.62	4.40	2.97	35.69	-17.7	-36.5	-37.2	0.40	1.26	-80.9	-107.3	-127.8	-148.3	6.0	-102.43
1.25	29.63	2316.9	2305.5	2297.8	5.64	4.42	3.03	35.72	-17.7	-36.1	-35.4	0.40	0.85	-82.0	-107.1	-127.7	-147.0	8.5	-105.11
1.50	30.08	2324.4	2312.9	2305.1	5.71	4.44	3.05	35.75	-17.8	-34.7	-33.5	0.40	0.30	-79.8	-106.6	-127.3	-147.9	10.0	-106.26
1.75	30.68	2332.0	2320.4	2312.4	5.72	4.47	3.07	35.79	-17.8	-33.0	-34.0	0.38	0.40	-81.0	-106.7	-127.3	-147.1	20.8	-113.92
2.00	31.25	2339.8	2328.1	2319.9	5.74	4.50	3.10	35.82	-17.2	-33.6	-32.2	0.37	0.99	-82.2	-106.8	-127.7	-147.3	35.5	-119.35
2.25	31.95	2347.7	2335.9	2327.6	5.76	4.52	3.13	35.86	-16.8	-34.9	-30.8	0.34	1.37	-81.0	-106.8	-127.5	-147.4	60.7	-123.33
2.50	32.72	2355.9	2343.9	2335.5	5.83	4.56	3.13	35.89	-16.8	-34.6	-30.5	0.30	1.49	-81.1	-106.8	-128.1	-147.3	86.7	-126.56
2.75	33.44	2364.2	2352.1	2343.5	5.91	4.62	3.16	35.91	-17.2	-32.9	-31.1	0.24	1.41	-80.7	-106.0	-127.2	-147.5	100.0	-127.43
3.00	34.18	2372.7	2360.4	2351.7	5.97	4.70	3.23	35.94	-17.1	-31.6	-29.9	0.18	1.20	-80.3	-106.9	-127.8	-147.3	148.1	-131.15
3.25	34.55	2381.3	2369.0	2360.0	5.99	4.77	3.30	35.96	-17.1	-32.3	-28.9	0.10	0.86	-81.0	-106.4	-127.5	-147.2	177.0	-132.62
3.50	34.85	2389.9	2377.6	2368.5	5.98	4.81	3.36	35.99	-16.9	-31.4	-31.2	0.01	0.45	-79.3	-105.9	-127.2	-146.8	211.6	-134.17
3.75	34.70	2398.6	2386.3	2377.1	5.90	4.81	3.40	36.03	-16.8	-30.0	-30.2	0.12	0.09	-79.8	-104.5	-126.6	-146.6	302.4	-136.13
4.00	34.67	2407.3	2395.0	2385.8	5.86	4.75	3.39	36.06	-16.7	-29.3	-29.6	0.25	0.59	-80.5	-105.3	-126.6	-146.6	361.5	-138.87
4.25	34.54	2416.0	2403.7	2394.0	5.87	4.67	3.31	36.08	-17.0	-30.2	-31.4	0.39	1.05	-79.5	-104.6	-126.1	-146.4	507.5	-140.71
4.50	34.43	2424.7	2412.3	2403.0	5.87	4.65	3.21	36.11	-16.7	-31.6	-31.3	0.52	1.34	-78.9	-104.6	-125.9	-146.0	606.7	-142.60
4.75	34.55	2433.4	2420.9	2411.6	5.84	4.64	3.16	36.11	-16.2	-29.6	-30.5	0.66	1.39	-78.8	-104.1	-125.5	-145.5	851.6	-146.62
5.00	34.45	2442.1	2429.5	2420.0	5.85	4.67	3.12	36.12	-16.3	-28.8	-31.4	0.78	1.23	-79.4	-103.6	-125.1	-145.2	1000.0	-147.37

*at 25°C unless mentioned otherwise



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