

# Coaxial Voltage Controlled Oscillator

## ZX95-400+

Linear Tuning 200 to 380 MHz

### Features

- excellent harmonic suppression
- high power output, +10dBm typ.
- low phase noise
- wide bandwidth
- low pushing & pulling
- protected by US patent 6,790,049



CASE STYLE: GB956

Connectors	Model	Price.	Qty.
SMA	ZX95-400-S+	\$39.95 ea.	(1-9)

### Applications

- R & D
- lab
- instrumentation
- test equipment

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

### Electrical Specifications

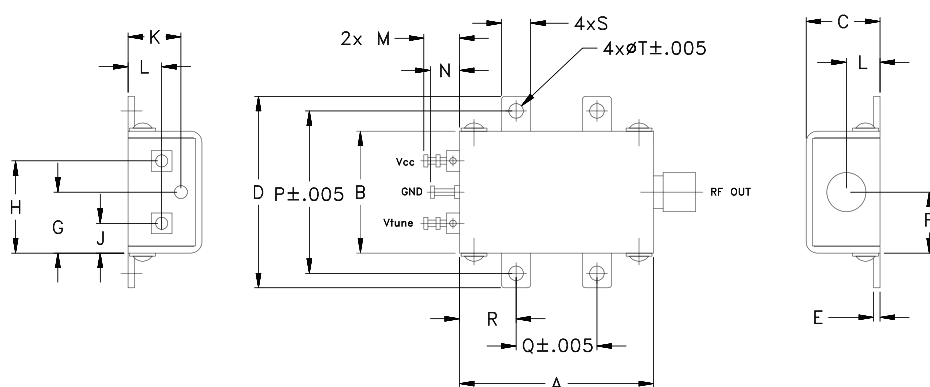
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz Typ.				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER Vcc Current (volts) (mA)				
								VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Typ.								Typ.	Typ.	Typ.
ZX95-400+	Min.	Max.	Typ.	1	10	100	1000	0.5	17	10-18	580	0.13	-90	-25	-18	0.5	0.2	12	21			

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	13V
Absolute Max. Tuning Voltage (Vtune)	18V
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.
.120	.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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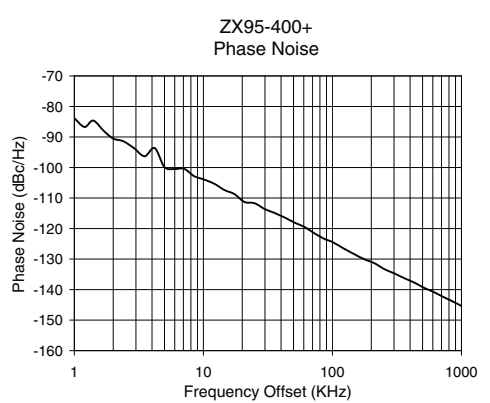
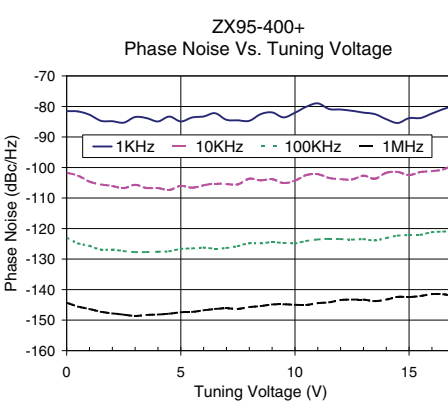
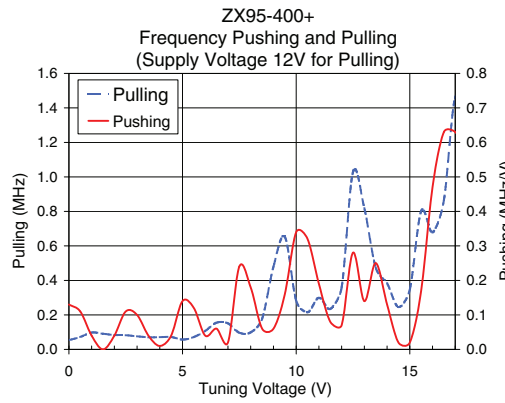
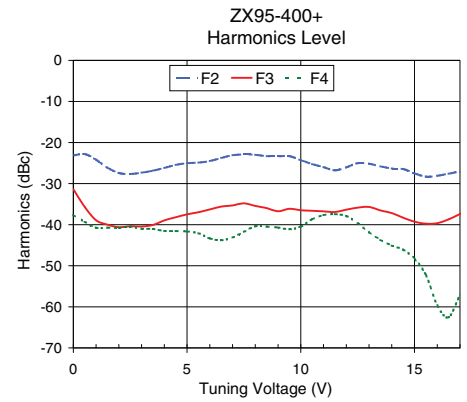
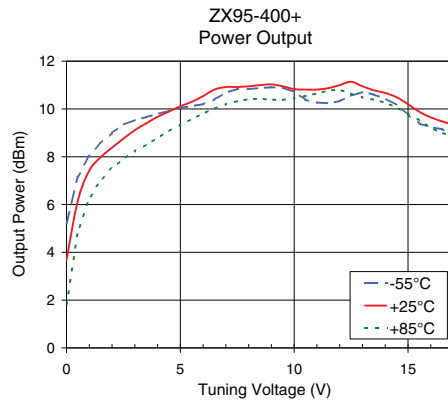
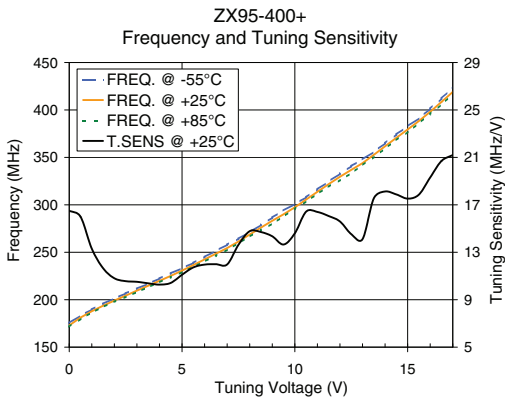
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ZX95-400+  
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# Performance Data & Curves\*

# ZX95-400+

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 290 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	16.50	175.5	172.9	171.5	5.22	3.69	1.81	15.93	-23.1	-31.4	-37.6	0.13	0.05	-81.5	-101.7	-123.0	-144.3	1.0	-83.87
0.50	16.00	183.3	181.2	179.9	7.17	6.17	4.86	16.01	-22.8	-35.7	-39.3	0.11	0.07	-81.6	-102.7	-124.9	-145.6	2.0	-90.52
1.00	13.30	189.8	187.8	186.5	8.04	7.42	6.26	16.05	-24.2	-38.9	-40.8	0.04	0.10	-82.7	-104.6	-125.7	-146.4	3.5	-96.31
1.50	11.66	195.7	193.7	192.4	8.56	7.98	7.02	16.08	-26.1	-40.0	-40.7	0.00	0.09	-84.7	-105.5	-126.9	-147.3	6.0	-100.48
2.00	10.81	201.3	199.1	197.8	9.00	8.38	7.53	16.09	-27.4	-40.6	-40.8	0.04	0.08	-84.8	-106.1	-126.9	-147.8	8.5	-102.87
3.00	10.51	211.7	209.6	208.1	9.54	9.11	8.23	16.09	-27.3	-40.4	-41.0	0.10	0.08	-83.5	-105.7	-127.7	-148.6	10.0	-103.87
4.00	10.28	222.3	219.9	218.4	9.79	9.67	8.79	16.07	-26.2	-39.0	-41.5	0.01	0.07	-84.9	-106.7	-127.6	-148.2	20.8	-111.29
5.00	11.10	233.2	230.7	229.2	10.04	10.11	9.34	16.02	-25.0	-37.5	-41.7	0.14	0.06	-84.9	-106.0	-126.7	-147.4	35.5	-114.86
6.00	11.96	245.0	242.5	240.3	10.20	10.54	9.81	15.98	-24.5	-36.3	-43.3	0.04	0.11	-83.3	-105.8	-126.2	-146.8	60.7	-119.49
7.00	11.98	258.0	254.5	252.7	10.68	10.92	10.20	15.88	-23.1	-35.3	-43.1	0.02	0.15	-84.4	-105.4	-126.4	-146.1	86.7	-123.38
8.00	14.78	271.1	268.7	266.6	10.83	10.95	10.41	15.78	-23.0	-35.4	-40.4	0.18	0.10	-84.7	-103.7	-124.8	-145.8	100.0	-124.42
9.00	14.35	286.6	283.2	280.3	10.91	11.03	10.39	15.70	-23.4	-36.7	-40.7	0.06	0.48	-81.9	-103.8	-124.5	-144.9	211.6	-131.36
10.00	14.60	300.9	297.4	295.7	10.72	10.83	10.45	15.55	-24.3	-36.5	-40.5	0.34	0.28	-82.1	-104.3	-124.8	-145.0	302.4	-134.70
11.00	16.40	316.3	313.8	311.5	10.27	10.81	10.65	15.47	-26.0	-36.8	-37.7	0.19	0.30	-79.0	-102.2	-123.6	-144.4	361.5	-136.27
12.00	15.59	332.9	329.6	326.2	10.33	11.00	10.81	15.39	-26.1	-36.3	-37.9	0.07	0.36	-81.0	-103.8	-123.4	-143.4	432.2	-137.73
13.00	14.11	347.9	343.9	341.8	10.71	10.95	10.48	15.24	-25.2	-35.7	-41.8	0.14	0.82	-82.0	-102.7	-123.5	-143.3	507.5	-139.33
14.00	18.13	365.0	361.8	359.4	10.44	10.67	10.26	15.16	-26.3	-37.2	-45.1	0.13	0.38	-84.2	-101.7	-123.1	-143.3	606.7	-140.75
15.00	17.53	382.8	379.5	376.9	9.76	10.20	9.81	15.08	-27.5	-39.3	-48.3	0.02	0.35	-83.8	-102.5	-122.1	-142.5	712.4	-142.25
16.00	19.31	401.4	398.0	395.6	9.24	9.65	9.21	14.99	-28.1	-39.6	-59.6	0.47	0.68	-82.3	-101.2	-121.2	-141.5	851.6	-143.83
17.00	21.19	423.1	419.0	416.1	8.95	9.31	8.86	14.94	-27.1	-37.4	-57.2	0.63	1.46	-79.6	-98.9	-120.8	-142.2	1000.0	-145.35

\*at 25°C unless mentioned otherwise



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