

Coaxial

Voltage Controlled Oscillator

ZX95-800A+

Wide Band 505 to 800 MHz

Features

- 0.25-5V tuning voltage range
- low phase noise
- low pulling
- protected by US patent 6,790,049

Applications

- r & d
- lab
- instrumentation
- wireless communications
- wireless broadband access



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-800A-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)		PORT TIVITY (MHz/V)	CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.	Max.	Vcc (volts)	Current (mA)
	Min.	Max.							Typ.	Typ.													
ZX95-800A+	505	800	+0.7	-75	-102	-125	-146	0.25	5	75-108	60	35	-90	-31	-15	0.7	1.7	5	40				

Maximum Ratings

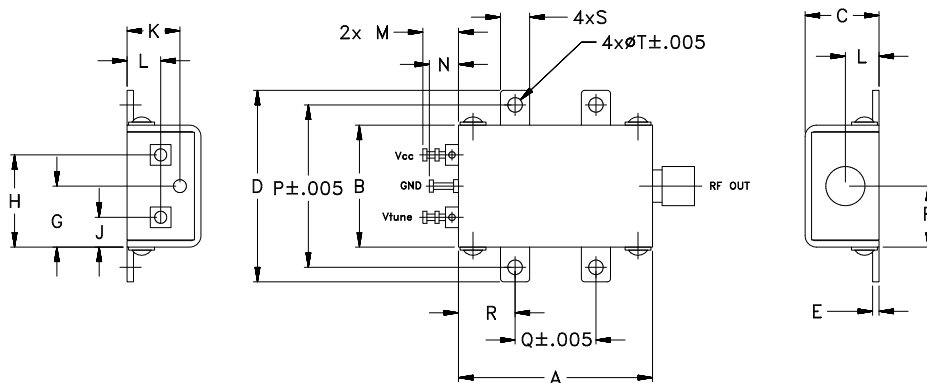
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6.5V
Absolute Max. Tuning Voltage (Vtune)	7.0V
All specifications	50 ohm system

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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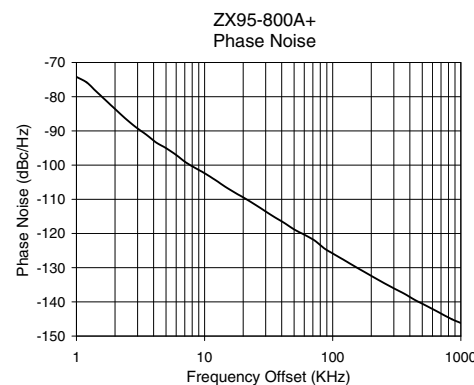
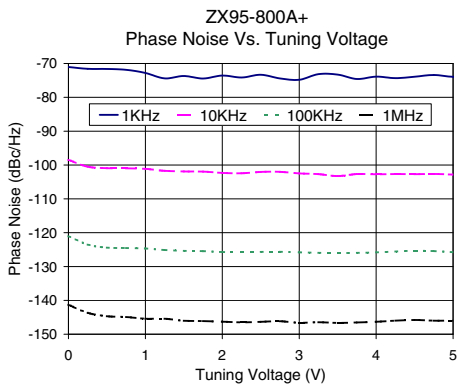
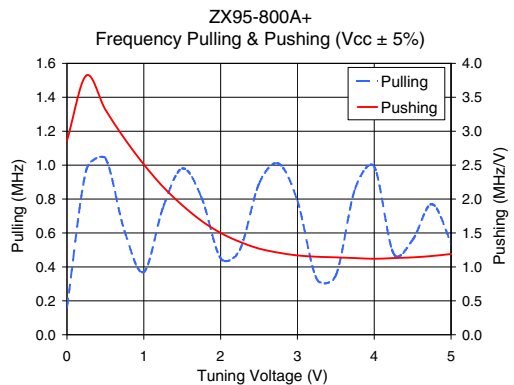
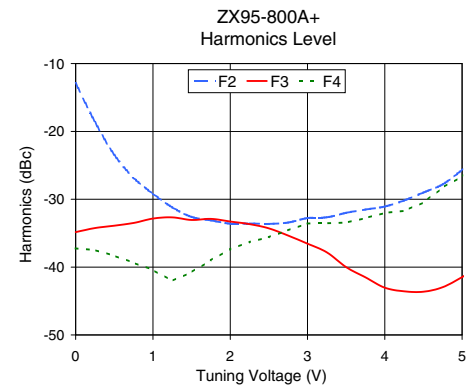
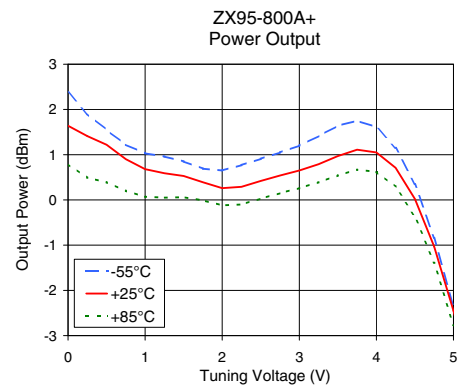
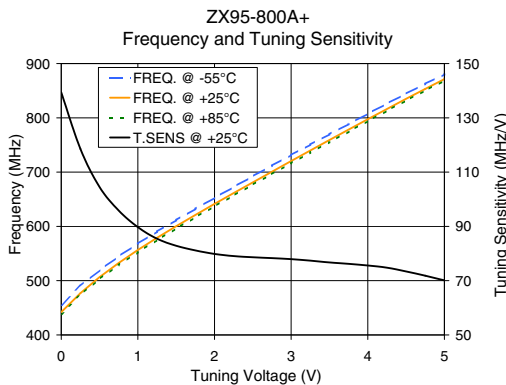
REV. A
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Performance Data & Curves*

ZX95-800A+

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 650 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	139.40	455.1	442.0	438.5	2.38	1.64	0.79	32.34	-12.9	-34.9	-37.2	2.86	0.16	-71.0	-98.5	-121.0	-141.3	1.0	-74.20
0.50	104.52	519.2	506.5	503.1	1.55	1.22	0.39	32.50	-23.5	-33.9	-38.3	3.32	1.04	-71.6	-100.9	-124.4	-144.7	2.0	-83.59
0.75	95.85	544.7	532.6	528.8	1.22	0.90	0.20	32.59	-26.8	-33.5	-39.4	2.89	0.61	-71.9	-101.0	-124.5	-144.9	3.5	-91.08
1.00	89.72	568.2	556.6	552.5	1.03	0.68	0.07	32.69	-29.2	-32.9	-40.4	2.51	0.37	-72.8	-101.2	-124.7	-145.4	6.0	-97.03
1.25	85.46	590.4	579.0	574.8	0.96	0.59	0.05	32.78	-31.2	-32.7	-42.0	2.18	0.75	-74.4	-101.7	-125.1	-145.4	8.5	-100.90
1.50	82.86	611.7	600.4	596.0	0.85	0.53	0.06	32.86	-32.6	-33.1	-40.8	1.91	0.98	-73.7	-101.9	-125.4	-146.0	10.0	-102.39
1.75	81.15	632.3	621.1	616.7	0.69	0.39	-0.01	32.93	-33.1	-32.9	-39.0	1.68	0.81	-74.4	-101.9	-125.5	-146.1	20.8	-109.81
2.00	79.84	652.6	641.4	637.0	0.65	0.26	-0.12	32.98	-33.6	-33.3	-37.3	1.50	0.45	-73.6	-102.3	-125.7	-146.3	35.5	-115.31
2.25	79.06	672.5	661.4	657.0	0.77	0.29	-0.10	33.03	-33.6	-33.7	-36.3	1.37	0.50	-74.1	-102.4	-125.7	-146.5	60.7	-120.44
2.50	78.64	692.3	681.1	676.8	0.91	0.42	0.03	33.06	-33.6	-34.3	-35.6	1.27	0.89	-73.3	-102.1	-125.7	-146.3	86.7	-124.46
2.75	78.30	711.9	700.8	696.6	1.05	0.54	0.15	33.08	-33.4	-35.4	-34.6	1.21	1.01	-74.4	-102.0	-125.7	-146.2	100.0	-125.84
3.00	77.92	731.4	720.4	716.2	1.20	0.65	0.26	33.09	-32.8	-36.6	-33.6	1.17	0.79	-74.8	-102.5	-125.8	-146.6	148.1	-129.58
3.25	77.38	750.6	739.8	735.8	1.41	0.79	0.39	33.09	-32.7	-37.8	-33.5	1.15	0.33	-73.2	-102.7	-125.9	-146.5	177.0	-131.25
3.50	76.72	769.8	759.2	755.3	1.64	0.97	0.54	33.09	-32.0	-40.0	-33.4	1.14	0.35	-73.3	-103.3	-126.0	-146.6	211.6	-132.92
3.75	76.20	788.7	778.4	774.7	1.75	1.11	0.67	33.08	-31.5	-41.5	-32.8	1.13	0.86	-74.6	-102.7	-126.0	-146.5	302.4	-136.12
4.00	75.59	807.5	797.4	793.9	1.61	1.05	0.62	33.07	-31.1	-43.0	-32.0	1.12	0.99	-73.9	-102.7	-125.8	-146.3	361.5	-137.60
4.25	74.77	826.1	816.3	812.9	1.15	0.71	0.29	33.07	-30.2	-43.6	-31.7	1.13	0.48	-74.3	-102.7	-125.6	-146.0	507.5	-140.66
4.50	73.39	844.5	835.0	831.7	0.35	0.02	-0.37	33.07	-29.0	-43.6	-30.5	1.14	0.56	-73.9	-102.7	-125.3	-145.8	606.7	-142.17
4.75	71.83	862.5	853.4	850.2	-0.84	-1.03	-1.39	33.08	-27.8	-43.0	-28.3	1.16	0.77	-73.4	-102.7	-125.4	-146.0	851.6	-145.10
5.00	70.12	880.1	871.3	868.4	-2.35	-2.45	-2.77	33.08	-25.7	-41.5	-26.6	1.19	0.54	-73.9	-102.8	-125.8	-146.0	1000.0	-146.18

*at 25°C unless mentioned otherwise



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