

Coaxial

Voltage Controlled Oscillator

ZX95-3900A+

Linear Tuning 3650 to 3900 MHz

Features

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



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communications
- radio link

Connectors	Model
SMA	ZX95-3900A-S+

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

Electrical Specifications

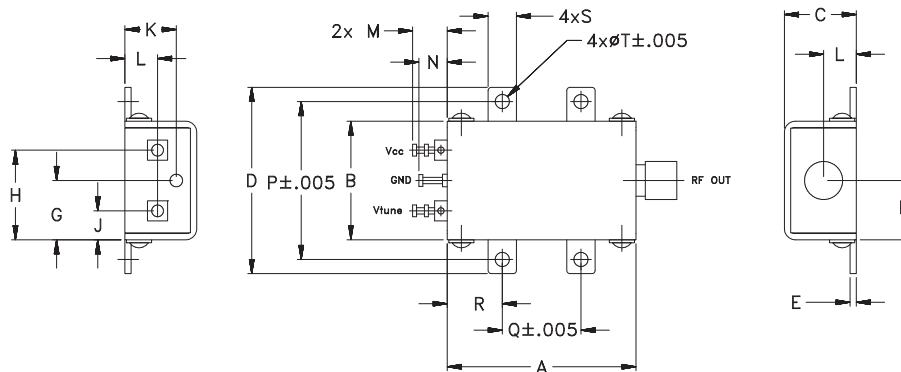
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Vcc (volts)	Current (mA)
					Typ.	Typ.	Typ.	Typ.	Min.	Max.	Typ.	Typ.		Typ.	Typ.			Max.	Max.	
ZX95-3900A+	3650	3900	+4.5	-72	-96	-118	-138	0.5	12	34-40	20	100	-90	-20	-12	2	4	5	40	

Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	14V
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

Notes

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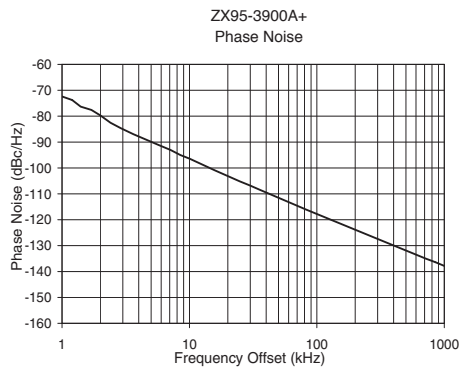
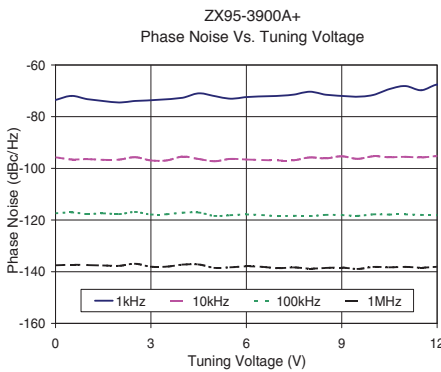
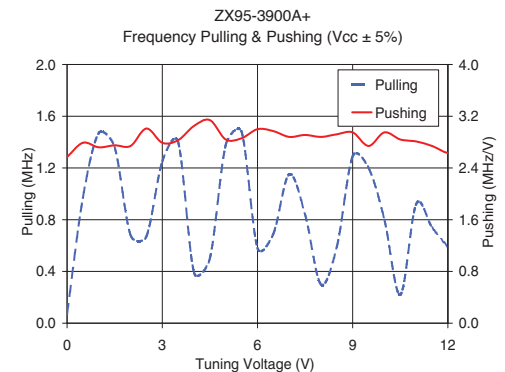
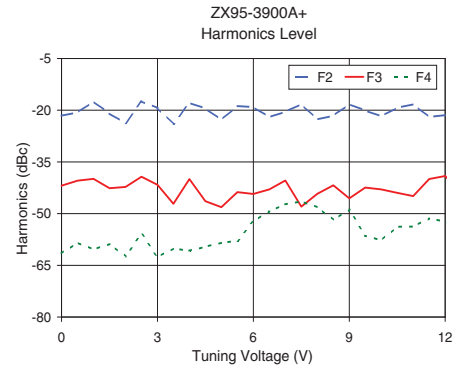
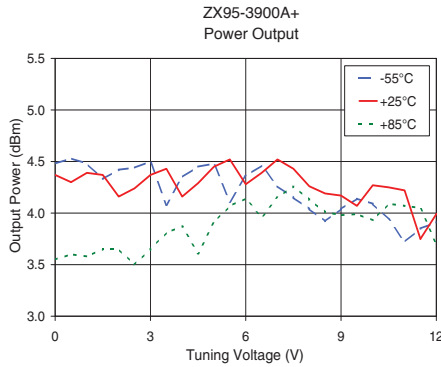
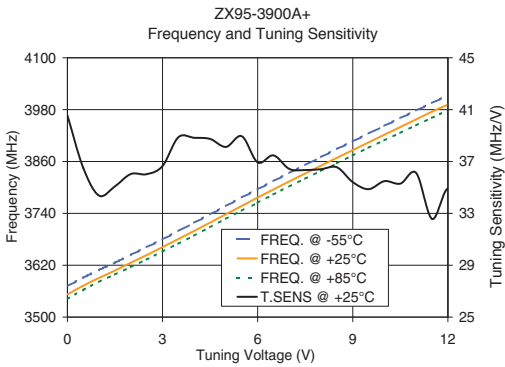
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Performance Data & Curves*

ZX95-3900A+

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 3775 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	40.56	3571.7	3552.4	3542.1	4.48	4.37	3.55	30.06	-21.6	-41.9	-61.5	2.57	0.07	-73.53	-95.7	-117.4	-137.5	1.0	-72.40
0.50	36.51	3591.4	3572.7	3562.9	4.53	4.30	3.60	30.06	-20.7	-40.4	-58.5	2.79	0.97	-71.95	-96.6	-117.1	-137.3	2.0	-79.71
1.00	34.37	3609.2	3590.9	3581.3	4.48	4.39	3.58	30.07	-17.5	-39.9	-60.4	2.72	1.47	-73.23	-96.4	-117.7	-137.4	3.5	-86.55
1.50	35.09	3626.2	3608.1	3598.5	4.33	4.37	3.65	30.07	-21.0	-42.6	-58.8	2.75	1.36	-73.91	-96.7	-117.4	-137.6	6.0	-91.47
2.00	36.03	3644.2	3625.7	3615.6	4.42	4.16	3.65	30.09	-23.8	-42.3	-62.4	2.74	0.68	-74.51	-96.6	-117.7	-137.7	8.5	-95.01
2.50	36.02	3661.8	3643.7	3633.2	4.44	4.24	3.50	30.08	-17.5	-39.3	-55.8	3.01	0.67	-73.93	-95.7	-116.9	-136.9	10.0	-96.38
3.00	36.65	3679.8	3661.7	3651.8	4.50	4.37	3.65	30.14	-19.4	-41.6	-62.6	2.79	1.25	-73.69	-97.0	-117.9	-138.1	20.8	-103.46
4.00	38.83	3718.3	3699.4	3688.2	4.35	4.16	3.87	30.18	-17.9	-40.0	-60.8	3.05	0.39	-72.67	-95.5	-117.2	-137.2	35.5	-108.40
5.00	38.12	3757.1	3738.2	3727.3	4.48	4.45	3.91	30.30	-22.8	-48.1	-58.5	2.84	1.38	-72.02	-97.2	-118.4	-138.5	60.7	-113.34
5.50	38.95	3776.8	3757.3	3745.9	4.11	4.52	4.07	30.34	-18.8	-43.8	-57.9	2.86	1.48	-73.03	-96.3	-118.1	-138.3	86.7	-116.55
6.00	36.93	3795.7	3776.8	3764.7	4.36	4.28	4.14	30.40	-19.1	-44.3	-52.3	3.00	0.58	-72.40	-96.6	-117.8	-137.9	100.0	-117.68
7.00	36.43	3833.3	3814.0	3802.0	4.26	4.52	4.15	30.52	-20.4	-40.4	-47.3	2.88	1.15	-71.97	-96.9	-118.5	-138.6	148.1	-121.25
8.00	36.40	3870.3	3850.4	3838.0	4.04	4.26	4.13	30.62	-22.7	-44.3	-48.1	2.88	0.30	-70.33	-95.8	-118.5	-138.8	177.0	-122.75
9.00	35.41	3906.5	3886.8	3873.7	4.04	4.17	3.98	30.76	-18.3	-45.6	-48.9	2.95	1.29	-71.95	-95.3	-118.1	-138.4	211.6	-124.39
9.50	34.86	3924.6	3904.5	3891.6	4.14	4.07	3.99	30.86	-20.1	-42.4	-56.4	2.74	1.20	-72.28	-96.3	-118.4	-138.9	302.4	-127.54
10.00	35.49	3942.5	3922.0	3908.9	4.09	4.27	3.93	30.87	-21.8	-43.0	-57.8	2.95	0.80	-71.56	-95.3	-117.8	-138.2	361.5	-129.04
10.50	35.29	3960.5	3939.7	3926.1	3.94	4.25	4.09	30.93	-19.3	-44.0	-53.8	2.84	0.22	-69.31	-95.7	-117.9	-138.3	507.5	-131.96
11.00	36.11	3978.2	3957.4	3943.5	3.72	4.22	4.07	30.99	-18.3	-44.9	-53.8	2.81	0.92	-68.16	-95.5	-117.8	-138.1	606.7	-133.56
11.50	32.57	3995.4	3975.4	3960.8	3.85	3.75	4.05	31.10	-22.0	-40.0	-51.4	2.74	0.74	-69.78	-95.8	-118.0	-138.5	851.6	-136.41
12.00	34.90	4013.2	3991.7	3978.5	3.91	3.99	3.70	31.14	-21.4	-39.1	-52.3	2.63	0.59	-67.57	-95.2	-118.1	-138.1	1000.0	-137.84

*at 25°C unless mentioned otherwise



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