

Coaxial

# Voltage Controlled Oscillator

## ZX95-3600A+

Linear Tuning 3350 to 3600 MHz

### Features

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

### Applications

- r & d
- lab
- instrumentation
- wireless communications
- WiMAX RF base station
- SAB / SAP



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-3600A-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)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.
ZX95-3600A+	3350	3600	+5	-75	-100	-120	-140	0.5	15	25-30	30	300	-90	-29	-17	1	1	8	52

### Maximum Ratings

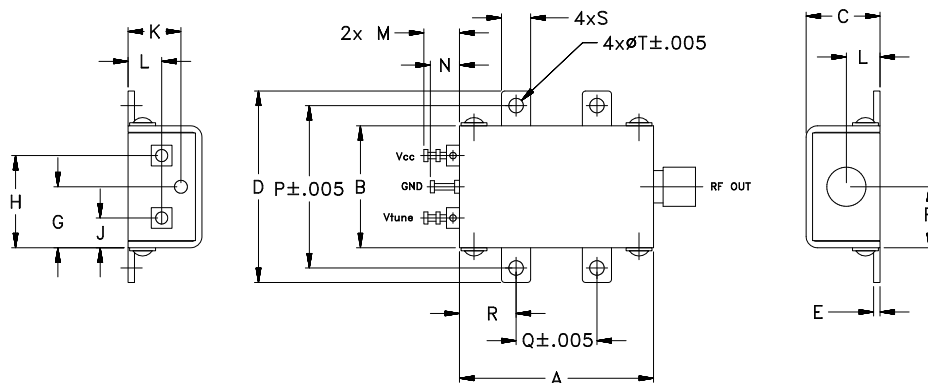
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	10V
Absolute Max. Tuning Voltage (Vtune)	17V
All specifications	50 ohm system

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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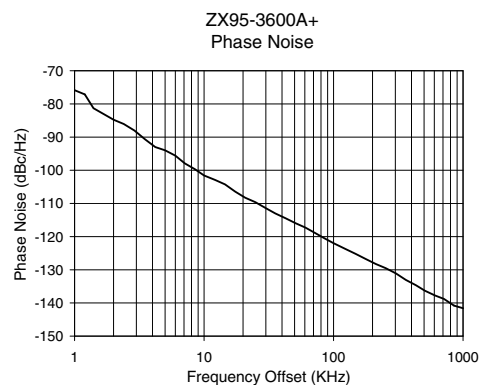
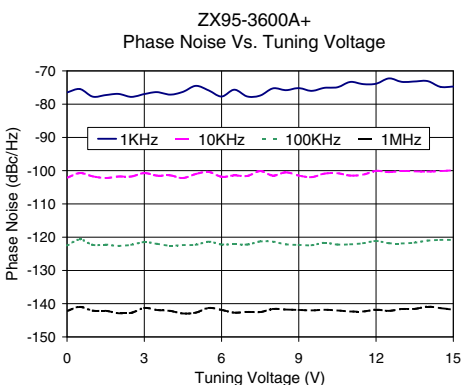
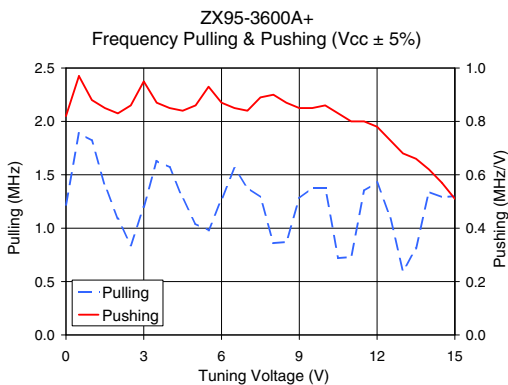
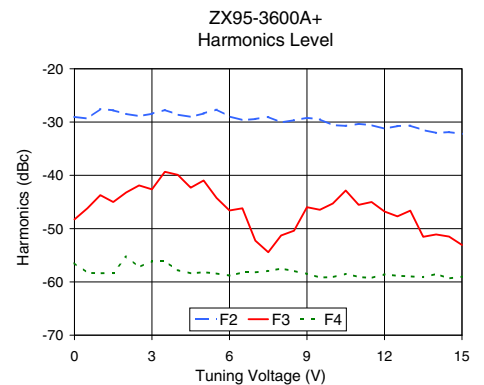
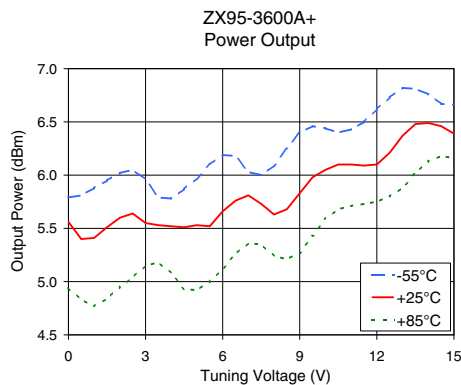
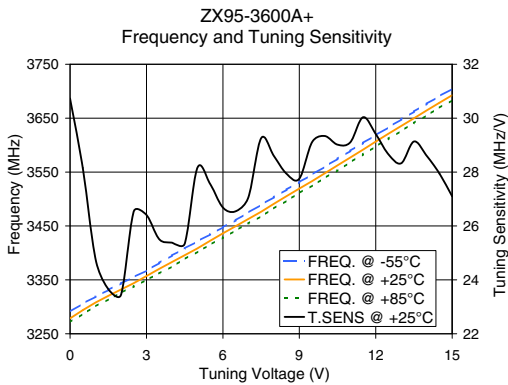
REV. A  
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# Performance Data & Curves\*

# ZX95-3600A+

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 3470 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	30.73	3291.0	3278.5	3271.6	5.79	5.56	4.94	43.50	-29.0	-48.3	-56.5	0.82	1.22	-76.5	-102.2	-122.5	-142.2	1.0	-75.86
0.50	28.15	3305.9	3293.9	3286.8	5.81	5.40	4.83	43.47	-29.4	-46.2	-58.3	0.97	1.89	-75.5	-100.7	-120.7	-141.0	2.0	-84.77
1.00	24.77	3318.9	3308.0	3300.9	5.88	5.41	4.77	43.51	-27.5	-43.7	-58.4	0.88	1.82	-77.7	-101.7	-122.3	-142.1	3.5	-90.66
1.50	23.66	3331.2	3320.3	3313.8	5.95	5.51	4.84	43.55	-27.8	-45.0	-58.3	0.85	1.40	-77.3	-102.2	-122.2	-142.1	6.0	-95.59
2.00	23.44	3343.3	3332.2	3326.0	6.02	5.60	4.95	43.58	-28.5	-43.2	-55.3	0.83	1.09	-76.9	-101.8	-122.6	-142.9	8.5	-99.69
3.00	26.41	3367.2	3357.2	3349.9	5.96	5.55	5.15	43.55	-28.4	-42.6	-56.1	0.95	1.20	-77.0	-100.7	-121.5	-141.3	10.0	-101.56
4.00	25.38	3395.0	3383.1	3374.6	5.78	5.52	5.08	43.64	-28.6	-39.9	-57.8	0.85	1.57	-77.1	-101.4	-122.6	-142.2	20.8	-108.27
5.00	28.16	3421.4	3408.5	3402.1	5.97	5.53	4.92	43.66	-28.4	-41.0	-58.2	0.86	1.04	-74.5	-101.0	-122.3	-142.7	35.5	-113.01
6.00	26.68	3447.6	3436.3	3428.4	6.19	5.66	5.12	43.69	-28.9	-46.6	-58.8	0.87	1.27	-77.7	-101.8	-122.2	-141.9	60.7	-117.29
7.00	27.06	3474.9	3463.0	3454.6	6.03	5.81	5.36	43.77	-29.4	-52.3	-58.2	0.84	1.38	-77.7	-101.6	-122.2	-142.5	86.7	-120.68
8.00	28.60	3503.5	3491.1	3482.5	6.09	5.63	5.24	43.78	-30.1	-51.3	-57.5	0.90	0.86	-75.3	-101.5	-121.4	-141.6	100.0	-121.98
8.50	27.93	3517.5	3505.4	3496.9	6.25	5.68	5.21	43.82	-29.6	-50.4	-58.0	0.87	0.87	-75.8	-100.5	-122.2	-141.8	148.1	-125.20
9.00	27.75	3531.3	3519.4	3511.1	6.40	5.83	5.27	43.85	-29.2	-46.0	-58.5	0.85	1.28	-75.2	-101.5	-122.3	-141.9	177.0	-126.75
10.00	29.34	3559.9	3547.8	3539.1	6.44	6.05	5.59	43.88	-30.6	-45.3	-59.1	0.86	1.38	-75.1	-100.9	-121.7	-141.8	211.6	-128.25
11.00	29.11	3589.4	3577.0	3568.1	6.43	6.10	5.71	43.96	-30.3	-45.5	-59.1	0.80	0.73	-73.3	-101.5	-122.2	-142.4	302.4	-131.08
12.00	29.41	3618.3	3606.6	3597.5	6.62	6.10	5.75	43.99	-31.3	-46.8	-58.6	0.78	1.43	-73.9	-100.1	-121.2	-141.8	361.5	-133.04
13.00	28.33	3647.7	3635.6	3626.4	6.82	6.37	5.88	44.06	-30.7	-46.6	-59.0	0.68	0.60	-73.3	-100.1	-121.9	-141.6	507.5	-136.33
14.00	28.61	3676.6	3664.3	3655.2	6.76	6.49	6.13	44.08	-32.0	-51.1	-58.5	0.62	1.34	-73.1	-100.3	-121.1	-140.9	606.7	-137.73
14.50	27.94	3690.8	3678.6	3669.3	6.67	6.46	6.18	44.12	-31.9	-51.5	-59.3	0.57	1.29	-74.8	-100.1	-120.8	-141.3	851.6	-140.79
15.00	27.10	3704.6	3692.6	3683.2	6.66	6.39	6.16	44.14	-32.2	-53.1	-59.0	0.51	1.30	-74.7	-99.9	-120.8	-141.8	1000.0	-141.60

\*at 25°C unless mentioned otherwise



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