

Coaxial

Voltage Controlled Oscillator

ZX95-3360A-S+

5V Tuning for PLL ICs 3160 to 3360 MHz

Features

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

Applications

- r & d
- lab
- Instrumentation
- wireless communications
- WiMAX 3.5 GHz



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-3360A-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 dBr (MHz)	PUSHING (MHz/V)	DC OPERATING POWER			
	Typ.	1		10	100	1000	VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Typ.	Typ.		Typ.	Max.			Typ.	Typ.	Vcc (volts)	Current (mA)
	Min.	Max.	Typ.					Min.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Typ.	Max.			
ZX95-3360A-S+	3160	3360	+3.5	-69	-96	-117	-138	0.5	5	74-84	12	120	-90	-18	-10	1	1	5	45		

Maximum Ratings

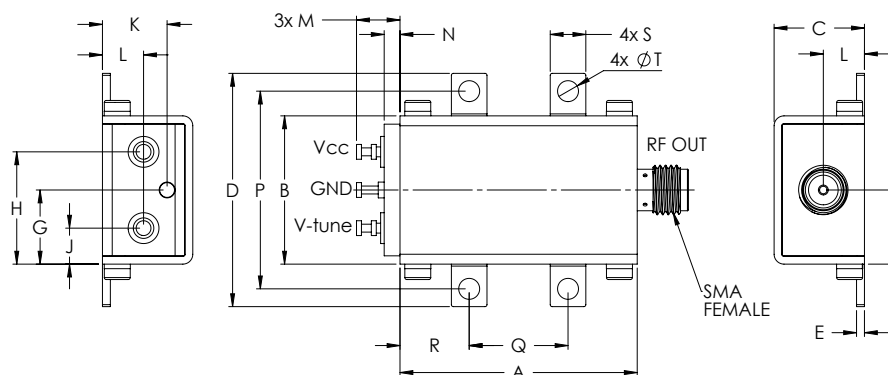
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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	.08	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	2.03	25.40	12.70	8.89	4.57	2.69	35.0

Notes

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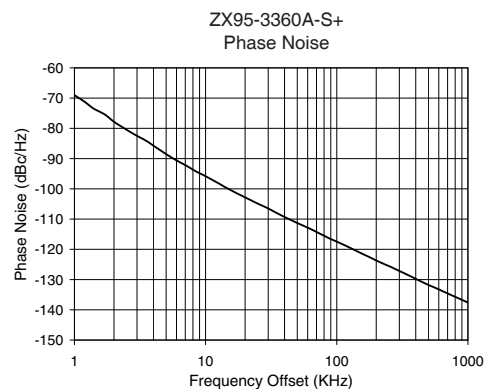
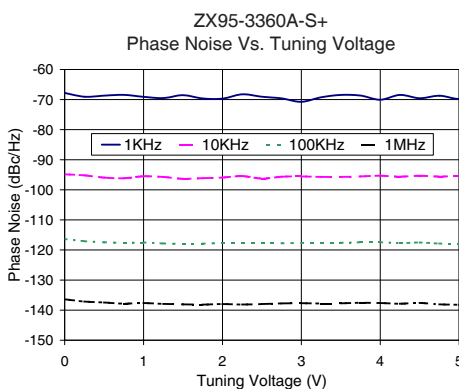
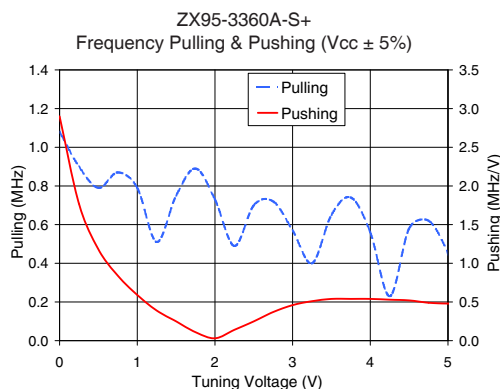
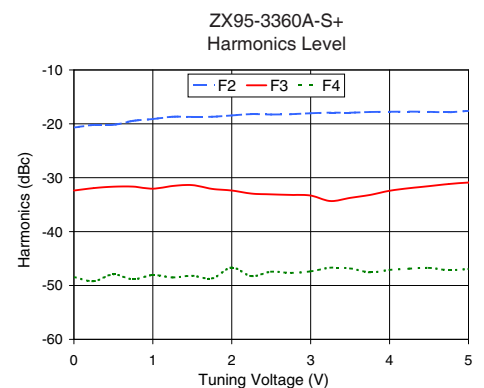
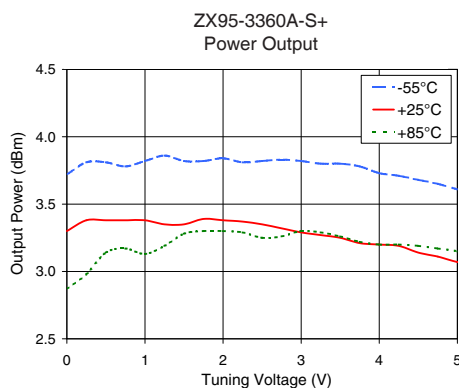
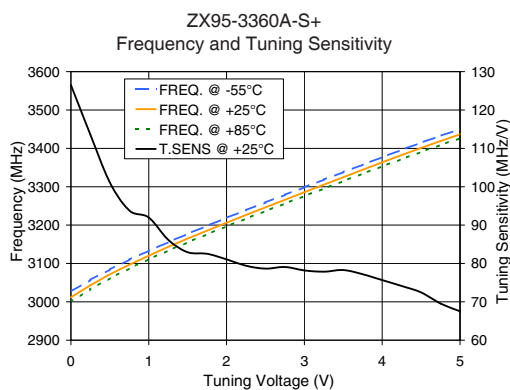
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Performance Data & Curves*

ZX95-3360A-S+

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 3260 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	126.51	3026.7	3011.6	2999.8	3.72	3.30	2.87	36.95	-20.7	-32.4	-48.4	2.90	1.08	-67.8	-94.9	-116.3	-136.4	1.0	-69.02
0.50	101.12	3084.1	3071.6	3061.4	3.81	3.38	3.14	37.08	-20.2	-31.7	-47.9	1.18	0.79	-68.7	-95.9	-117.4	-137.5	2.0	-77.81
0.75	93.81	3109.8	3096.9	3086.7	3.78	3.38	3.17	37.16	-19.4	-31.7	-48.9	0.84	0.87	-68.4	-96.2	-117.6	-137.9	3.5	-84.05
1.00	91.97	3133.3	3120.3	3111.3	3.82	3.38	3.13	37.20	-19.1	-32.1	-48.1	0.59	0.79	-69.1	-95.5	-117.5	-137.7	6.0	-90.60
1.25	86.16	3155.4	3143.3	3133.7	3.86	3.35	3.19	37.26	-18.7	-31.5	-48.5	0.39	0.51	-69.5	-95.7	-117.8	-137.9	8.5	-94.30
1.50	82.94	3177.1	3164.9	3155.2	3.82	3.35	3.28	37.33	-18.7	-31.4	-48.2	0.25	0.75	-68.5	-96.3	-118.0	-138.1	10.0	-95.82
1.75	82.52	3198.1	3185.6	3176.2	3.82	3.39	3.30	37.39	-18.7	-32.1	-48.7	0.11	0.89	-69.6	-96.1	-117.9	-138.2	20.8	-103.18
2.00	81.07	3218.6	3206.2	3196.9	3.84	3.38	3.30	37.41	-18.4	-32.4	-46.7	0.03	0.73	-69.7	-95.9	-117.7	-138.0	35.5	-108.16
2.25	79.42	3238.9	3226.5	3216.9	3.81	3.37	3.29	37.47	-18.2	-32.9	-48.3	0.14	0.49	-68.3	-95.5	-117.7	-138.1	60.7	-112.95
2.50	78.66	3259.0	3246.4	3236.6	3.82	3.35	3.25	37.51	-18.3	-33.1	-47.4	0.25	0.70	-69.1	-96.3	-117.8	-138.0	86.7	-116.26
2.75	79.08	3278.9	3266.0	3256.3	3.83	3.32	3.26	37.55	-18.2	-33.2	-47.7	0.37	0.72	-69.6	-95.7	-117.8	-137.8	100.0	-117.46
3.00	78.18	3298.7	3285.8	3275.7	3.82	3.29	3.30	37.57	-18.0	-33.3	-47.4	0.46	0.57	-70.8	-95.6	-117.7	-137.7	148.1	-120.96
3.25	77.85	3318.6	3305.3	3295.2	3.80	3.27	3.29	37.60	-17.9	-34.3	-46.7	0.51	0.40	-69.2	-95.7	-117.6	-137.8	177.0	-122.56
3.50	78.29	3338.2	3324.8	3314.8	3.80	3.25	3.26	37.61	-17.9	-33.8	-46.8	0.54	0.65	-68.5	-95.7	-117.6	-137.7	211.6	-124.18
3.75	77.19	3357.7	3344.4	3334.1	3.78	3.21	3.22	37.62	-17.8	-33.2	-47.6	0.54	0.74	-68.7	-95.6	-117.4	-137.6	302.4	-127.22
4.00	75.68	3377.1	3363.7	3353.2	3.73	3.20	3.20	37.64	-17.8	-32.4	-47.1	0.54	0.56	-70.0	-95.3	-117.4	-137.7	355.1	-128.63
4.25	74.14	3396.3	3382.6	3371.9	3.71	3.19	3.20	37.65	-17.7	-31.9	-46.9	0.53	0.23	-68.5	-95.6	-117.7	-137.9	498.5	-131.73
4.50	72.45	3414.7	3401.1	3390.8	3.68	3.14	3.19	37.65	-17.8	-31.6	-46.7	0.52	0.58	-69.6	-95.3	-117.5	-137.6	595.9	-133.20
4.75	69.55	3432.6	3419.2	3408.9	3.65	3.11	3.17	37.68	-17.8	-31.2	-47.2	0.49	0.62	-68.7	-95.6	-117.9	-138.1	982.3	-137.46
5.00	67.51	3449.9	3436.6	3426.3	3.61	3.07	3.15	37.71	-17.6	-30.9	-47.0	0.48	0.45	-69.8	-95.4	-118.0	-138.2	1000.0	-137.60

*at 25°C unless mentioned otherwise



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