

Coaxial

Voltage Controlled Oscillator

ZX95-3060C+

Low Noise 2920 to 3060 MHz

Features

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



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communications
- test equipment

Connectors	Model
SMA	ZX95-3060C-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.	Typ.	Typ.	Vcc (volts)	Current (mA)
ZX95-3060C+	2920	3060	+3.2	-85	-112	-132	-152	0.25	18	8-14	30	70	-90	-18	-10	1.2	0.5	8	36			

Maximum Ratings

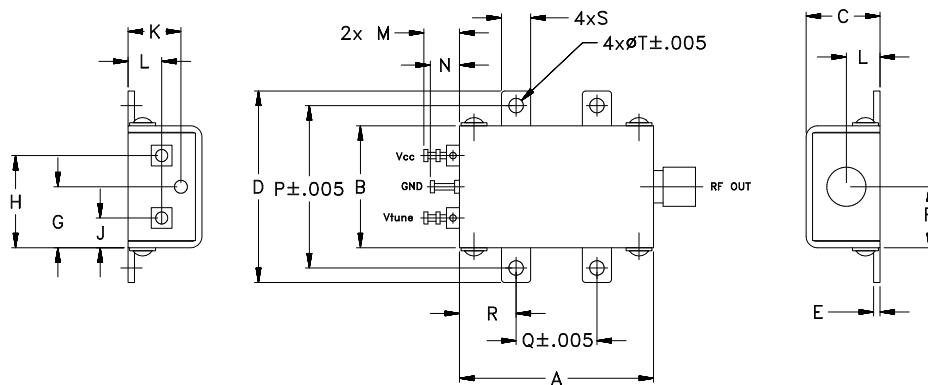
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	10V
Absolute Max. Tuning Voltage (Vtune)	20V
All specifications	50 ohm system

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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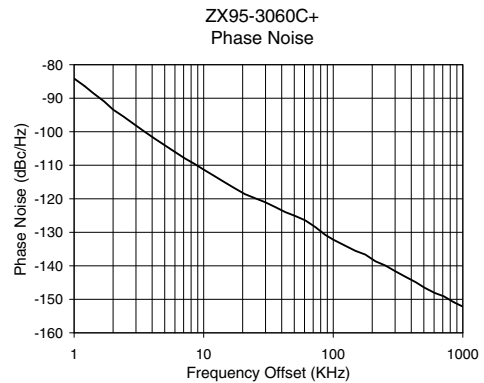
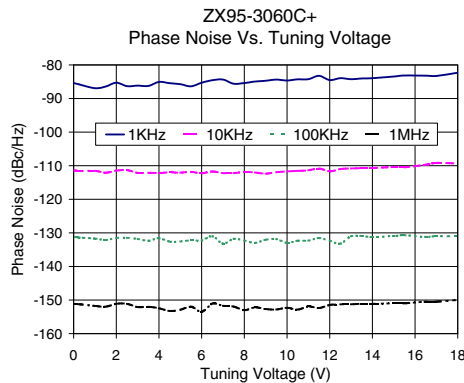
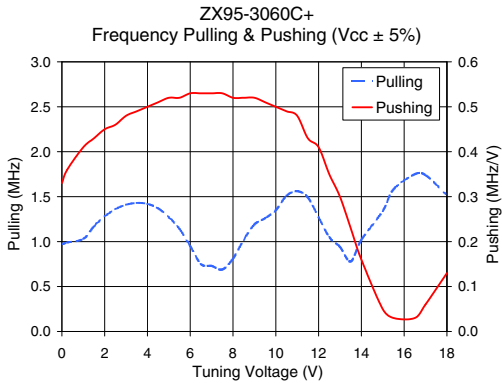
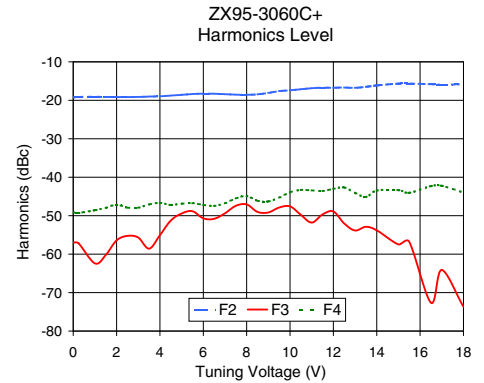
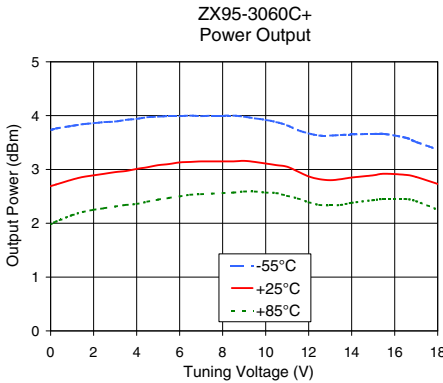
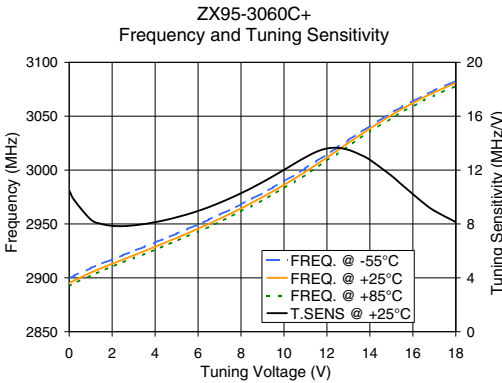
NON-CATALOG

Performance Data & Curves*

ZX95-3060C+

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 2990 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	10.48	2899.6	2895.0	2892.3	3.73	2.69	1.98	29.57	-19.2	-57.0	-49.2	0.33	0.97	-85.4	-111.4	-131.3	-151.2	1.0	-84.12
0.25	9.74	2902.1	2897.7	2895.0	3.76	2.72	2.03	29.60	-19.1	-57.2	-49.3	0.36	0.99	-85.8	-111.6	-131.4	-151.2	2.0	-93.40
1.00	8.33	2909.0	2904.8	2902.2	3.81	2.81	2.15	29.68	-19.1	-62.4	-48.6	0.41	1.03	-86.9	-111.5	-131.7	-151.8	3.5	-100.00
2.00	7.86	2917.1	2913.0	2910.4	3.86	2.89	2.25	29.76	-19.2	-56.4	-47.1	0.45	1.28	-85.3	-111.5	-131.5	-151.1	6.0	-106.02
3.00	7.89	2924.9	2920.8	2918.2	3.89	2.95	2.31	29.81	-19.1	-55.7	-47.9	0.48	1.41	-86.2	-112.1	-131.8	-152.1	8.5	-109.59
4.00	8.14	2932.8	2928.8	2926.1	3.94	3.01	2.36	29.85	-19.0	-55.1	-46.7	0.50	1.42	-85.1	-112.2	-131.6	-152.4	10.0	-111.29
5.00	8.50	2941.0	2937.0	2934.3	3.98	3.08	2.44	29.86	-18.6	-49.4	-46.9	0.52	1.27	-85.7	-112.1	-132.6	-152.9	20.8	-118.62
6.00	8.97	2949.5	2945.6	2942.9	3.99	3.13	2.50	29.86	-18.3	-50.7	-47.2	0.53	0.95	-85.3	-112.3	-132.3	-153.5	35.5	-122.44
7.00	9.57	2958.6	2954.7	2951.9	3.99	3.15	2.54	29.84	-18.4	-49.4	-46.8	0.53	0.73	-84.4	-112.2	-133.2	-151.7	60.7	-126.43
8.00	10.28	2968.2	2964.5	2961.7	4.00	3.15	2.56	29.81	-18.6	-47.1	-44.9	0.52	0.81	-85.4	-111.9	-132.3	-153.0	86.7	-130.76
9.00	11.10	2978.5	2974.9	2972.1	3.98	3.16	2.59	29.77	-18.1	-49.2	-46.3	0.52	1.19	-84.7	-112.4	-132.1	-152.7	100.0	-132.21
10.00	12.02	2989.7	2986.3	2983.4	3.92	3.11	2.57	29.72	-17.4	-47.6	-43.9	0.50	1.35	-84.7	-111.7	-133.0	-152.3	148.1	-135.53
11.00	12.95	3001.7	2998.5	2995.6	3.82	3.05	2.51	29.66	-16.9	-51.8	-43.4	0.48	1.56	-84.3	-111.4	-132.3	-151.9	177.0	-136.66
12.00	13.61	3014.6	3011.7	3008.8	3.67	2.87	2.39	29.58	-16.7	-48.9	-43.0	0.41	1.27	-84.5	-111.7	-132.4	-151.5	211.6	-138.65
13.00	13.50	3027.9	3025.3	3022.4	3.63	2.80	2.33	29.52	-16.8	-53.9	-44.1	0.30	0.94	-84.3	-110.8	-131.0	-151.3	302.4	-141.67
14.00	12.76	3040.9	3038.6	3035.7	3.65	2.85	2.38	29.50	-16.1	-53.8	-43.5	0.16	1.02	-83.9	-110.7	-131.3	-151.1	361.5	-143.30
15.00	11.59	3053.2	3051.1	3048.2	3.66	2.89	2.43	29.46	-15.7	-57.5	-43.4	0.05	1.34	-83.5	-110.4	-130.9	-151.0	507.5	-146.56
15.50	10.90	3058.8	3056.9	3054.0	3.66	2.92	2.45	29.43	-15.6	-56.8	-44.1	0.03	1.58	-83.2	-110.5	-130.7	-151.0	606.7	-148.09
16.50	9.55	3069.3	3067.5	3064.5	3.59	2.90	2.45	29.37	-15.8	-72.6	-42.3	0.03	1.75	-83.2	-109.7	-131.2	-150.5	851.6	-150.86
18.00	8.14	3082.8	3081.0	3078.1	3.37	2.73	2.25	29.19	-15.9	-73.7	-44.0	0.13	1.52	-82.3	-109.4	-131.1	-150.0	1000.0	-152.18

*at 25°C unless mentioned otherwise



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