

Voltage Controlled Oscillator

ZX95-3063C+

Linear Tuning 2812 to 3063 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- point-to-point



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-3063C-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.	Max.	Vcc (volts)	Current (mA)
									Min.	Max.													
ZX95-3063C+	2812	3063	+0.2	-78	-104	-124	-144	1	16	28-38	3	100	-90	-20	-14	1.5	0.5	8	35				

Maximum Ratings

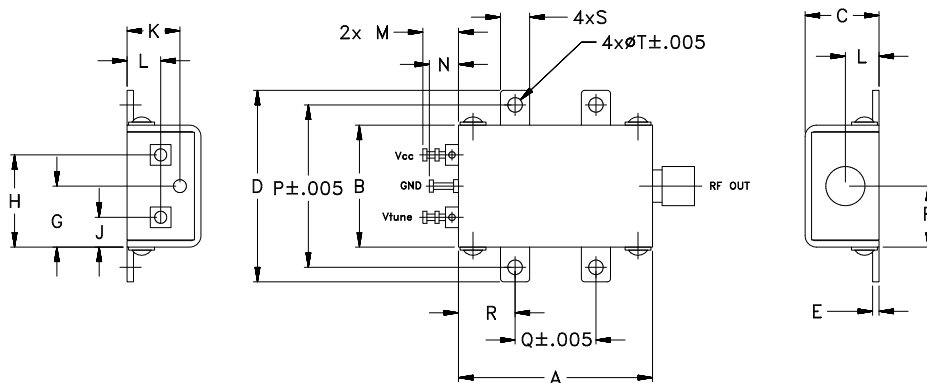
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	8.5V
Absolute Max. Tuning Voltage (Vtune)	18.0V
All specifications	50 ohm system

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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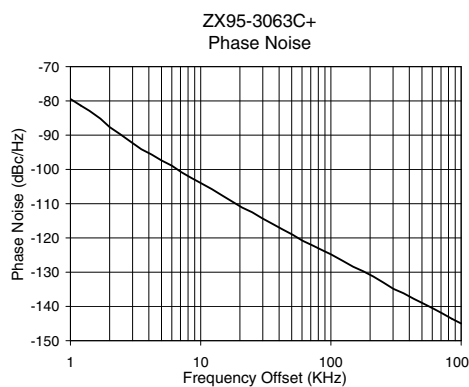
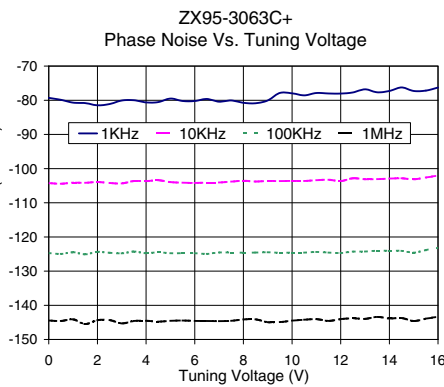
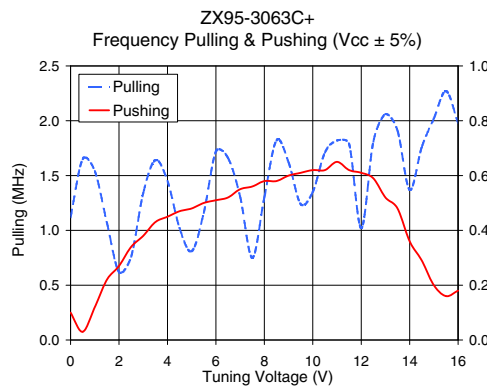
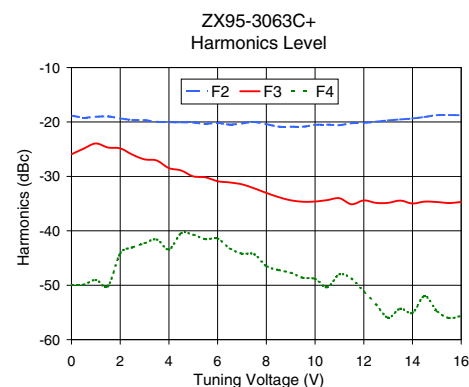
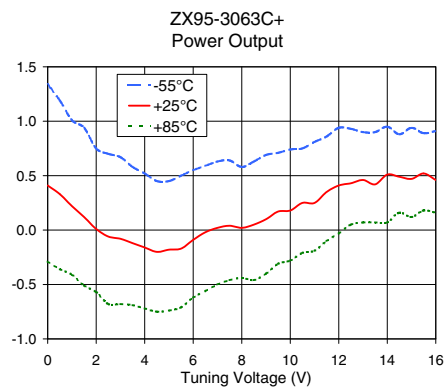
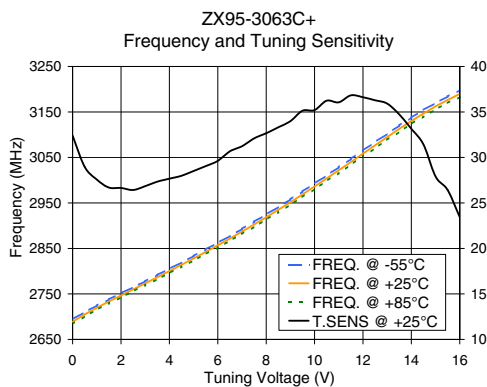


Performance Data & Curves*

ZX95-3063C+

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 2938 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	32.38	2694.3	2688.8	2683.9	1.34	0.41	-0.29	28.53	-18.8	-25.9	-50.0	0.10	1.12	-79.3	-104.3	-124.7	-144.5	1.0	-79.43
0.50	28.97	2710.0	2705.0	2700.7	1.19	0.33	-0.36	28.48	-19.2	-24.9	-49.9	0.03	1.65	-79.9	-104.4	-125.0	-144.6	2.0	-87.64
1.00	27.57	2724.4	2719.5	2715.2	1.01	0.22	-0.41	28.42	-19.0	-24.0	-49.0	0.12	1.54	-80.7	-104.1	-124.5	-144.1	3.5	-94.09
1.50	26.69	2737.9	2733.3	2729.1	0.94	0.12	-0.51	28.38	-19.0	-24.7	-50.1	0.22	1.07	-80.8	-104.2	-125.1	-145.5	6.0	-98.90
3.00	26.84	2777.8	2773.2	2769.0	0.67	-0.08	-0.68	28.29	-19.7	-26.9	-42.3	0.38	1.34	-80.1	-104.3	-124.8	-145.3	8.5	-102.51
4.00	27.67	2805.2	2800.2	2795.8	0.52	-0.16	-0.72	28.23	-20.0	-28.5	-43.4	0.45	1.45	-80.6	-103.7	-124.8	-144.5	10.0	-103.96
4.50	27.98	2819.2	2814.1	2809.6	0.45	-0.20	-0.75	28.22	-20.1	-28.9	-40.5	0.47	1.02	-80.5	-103.4	-124.5	-144.8	20.8	-111.12
5.00	28.51	2833.3	2828.1	2823.5	0.45	-0.18	-0.74	28.22	-20.1	-30.0	-40.7	0.48	0.81	-79.5	-104.0	-124.8	-144.6	35.5	-115.86
6.00	29.62	2862.4	2856.8	2852.1	0.55	-0.09	-0.62	28.22	-20.2	-30.9	-41.4	0.51	1.72	-80.2	-104.2	-124.8	-144.6	60.7	-120.84
7.50	32.09	2908.5	2902.6	2897.5	0.64	0.04	-0.46	28.19	-20.0	-32.2	-44.3	0.56	0.75	-80.1	-103.8	-124.6	-144.6	86.7	-123.67
8.50	33.31	2941.1	2935.0	2929.7	0.63	0.05	-0.46	28.19	-20.9	-33.8	-47.2	0.58	1.82	-80.9	-103.8	-124.6	-144.1	100.0	-124.79
9.00	33.99	2957.9	2951.6	2946.2	0.69	0.10	-0.40	28.18	-20.9	-34.4	-47.7	0.60	1.62	-80.1	-103.6	-124.5	-144.9	148.1	-128.40
10.50	36.24	3010.5	3003.8	2998.1	0.75	0.25	-0.21	28.18	-20.5	-34.4	-50.4	0.62	1.71	-78.6	-103.6	-124.6	-144.2	177.0	-129.73
11.50	36.82	3046.8	3039.9	3034.0	0.86	0.35	-0.10	28.18	-20.2	-35.1	-48.8	0.62	1.79	-78.0	-103.3	-124.6	-144.6	211.6	-131.25
12.00	36.62	3065.3	3058.4	3052.2	0.94	0.41	-0.03	28.17	-20.2	-34.4	-51.2	0.61	1.02	-78.0	-103.7	-124.7	-144.1	302.4	-134.89
12.50	36.28	3083.8	3076.7	3070.5	0.93	0.43	0.05	28.17	-20.0	-34.9	-53.5	0.59	1.81	-77.7	-102.8	-124.3	-143.8	361.5	-136.17
13.50	34.73	3120.3	3112.8	3106.3	0.90	0.42	0.07	28.17	-19.5	-34.4	-54.3	0.48	1.91	-77.7	-103.1	-124.0	-143.4	507.5	-139.09
14.50	31.42	3154.4	3146.7	3140.1	0.88	0.49	0.16	28.17	-19.1	-34.6	-52.0	0.29	1.76	-76.3	-102.8	-124.1	-143.7	606.7	-140.56
15.50	26.42	3184.2	3176.4	3169.7	0.89	0.52	0.18	28.18	-18.7	-34.9	-56.0	0.16	2.27	-77.2	-102.6	-123.9	-143.9	712.4	-141.98
16.00	23.45	3197.5	3189.6	3182.5	0.91	0.46	0.16	28.16	-18.8	-34.7	-55.7	0.18	1.98	-76.3	-102.0	-123.1	-143.3	1000.0	-144.98

*at 25°C unless mentioned otherwise



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