

Coaxial

Voltage Controlled Oscillator

ZX95-3185C+

Linear Tuning 2935 to 3185 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- point-to-point
- navigation system
- military



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-3185C-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									
								VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Min.									Max.	Typ.	Typ.	Typ.	Typ.	Max.	Vcc (volts)	Current (mA)
ZX95-3185C+	2935	3185	0	-78	-103	-124	-144	1	16	25-35	19	105	-90	-17	-10	1.3	0.8	8	38									

Maximum Ratings

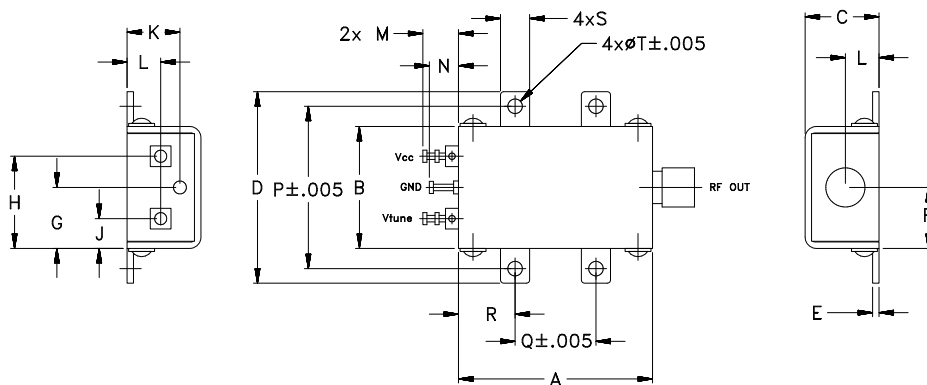
Operating Temperature -55°C to 85°C
 Storage Temperature -55°C to 100°C
 Absolute Max. Supply Voltage (Vcc) 8.5V
 Absolute Max. Tuning Voltage (Vtune) 18.0V
 All specifications 50 ohm system

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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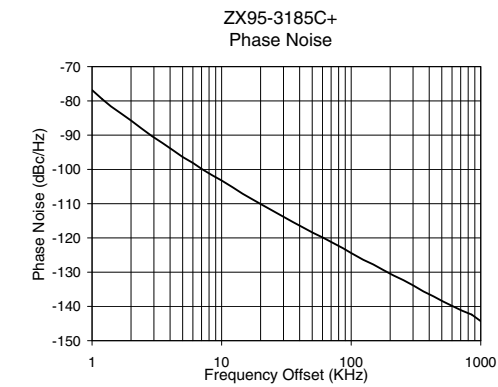
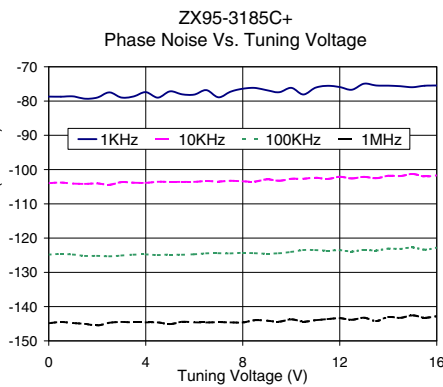
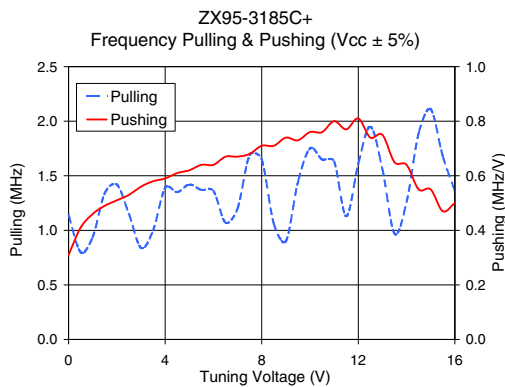
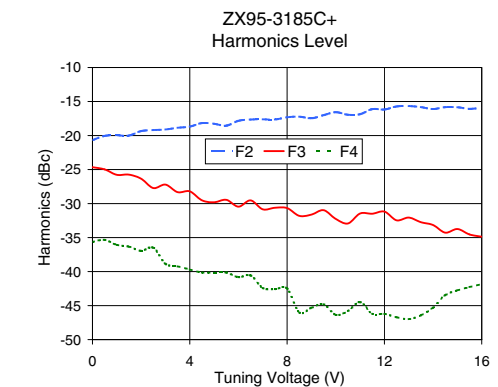
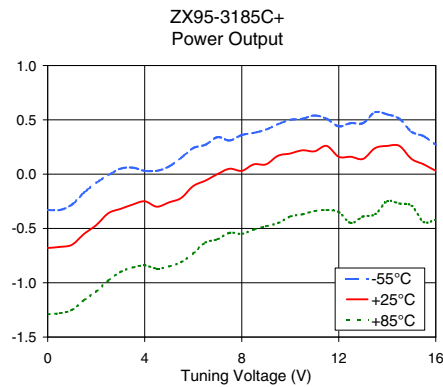
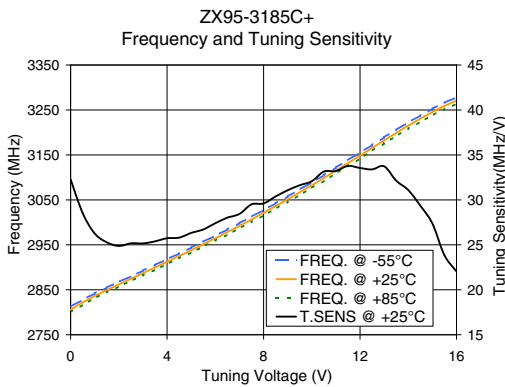
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Performance Data & Curves*

ZX95-3185C+

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 3060 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	32.28	2812.4	2805.8	2800.1	-0.33	-0.68	-1.29	28.61	-20.7	-24.7	-35.6	0.31	1.14	-78.7	-104.0	-124.8	-144.9	1.0	-76.85
0.50	28.52	2828.0	2822.0	2816.8	-0.33	-0.67	-1.28	28.61	-20.1	-25.0	-35.3	0.41	0.80	-78.7	-103.8	-124.6	-144.5	2.0	-85.72
1.00	26.26	2841.9	2836.2	2831.3	-0.28	-0.65	-1.25	28.61	-20.0	-25.8	-36.1	0.46	0.94	-78.6	-104.1	-124.8	-144.8	3.5	-92.33
2.50	25.17	2880.0	2874.4	2869.6	-0.01	-0.36	-0.98	28.64	-19.2	-27.7	-36.5	0.53	1.15	-77.5	-104.4	-125.3	-144.7	6.0	-98.12
3.00	25.16	2892.6	2887.0	2882.0	0.05	-0.32	-0.90	28.63	-19.1	-27.2	-38.9	0.56	0.84	-79.0	-103.7	-125.1	-144.5	8.5	-101.76
4.50	25.80	2930.8	2925.2	2920.0	0.03	-0.30	-0.87	28.63	-18.2	-29.5	-40.1	0.61	1.35	-79.0	-103.6	-125.0	-144.6	10.0	-103.23
5.00	26.33	2943.7	2938.1	2932.9	0.07	-0.26	-0.85	28.63	-18.3	-29.8	-40.1	0.62	1.42	-77.2	-103.6	-124.8	-145.1	20.8	-110.46
6.00	27.40	2970.4	2964.6	2959.3	0.24	-0.11	-0.73	28.63	-17.8	-30.5	-40.8	0.64	1.36	-78.1	-103.6	-124.7	-144.6	35.5	-115.38
6.50	28.02	2984.3	2978.3	2972.8	0.27	-0.06	-0.63	28.63	-17.7	-29.5	-40.6	0.67	1.07	-76.8	-103.3	-124.5	-144.6	60.7	-119.93
7.00	28.43	2998.2	2992.3	2986.8	0.34	0.00	-0.60	28.62	-17.6	-30.9	-42.4	0.67	1.20	-78.9	-103.5	-124.4	-144.5	86.7	-123.03
8.50	30.38	3042.2	3036.1	3030.3	0.38	0.09	-0.51	28.62	-17.2	-31.8	-46.0	0.71	1.06	-76.2	-103.5	-124.4	-144.0	100.0	-124.42
9.50	31.62	3073.0	3066.8	3060.9	0.46	0.17	-0.45	28.62	-17.0	-31.0	-44.8	0.73	1.44	-77.4	-103.3	-124.4	-144.4	148.1	-127.76
10.00	32.07	3089.0	3082.6	3076.5	0.50	0.19	-0.39	28.62	-16.6	-32.3	-46.4	0.76	1.75	-76.2	-102.7	-124.1	-143.7	177.0	-129.37
11.00	33.21	3121.8	3115.2	3108.8	0.54	0.21	-0.34	28.60	-16.9	-31.5	-44.5	0.80	1.63	-76.1	-102.4	-123.5	-144.0	211.6	-130.93
11.50	33.78	3138.4	3131.8	3125.6	0.51	0.26	-0.33	28.60	-16.1	-31.5	-46.2	0.77	1.13	-75.6	-102.7	-123.7	-143.7	302.4	-133.91
12.50	33.39	3172.0	3165.5	3159.1	0.47	0.16	-0.45	28.61	-15.7	-32.5	-46.7	0.74	1.95	-76.7	-102.6	-123.9	-143.9	361.5	-135.63
13.50	32.14	3205.7	3199.0	3192.3	0.57	0.24	-0.37	28.59	-15.8	-32.7	-46.4	0.65	0.97	-75.5	-102.6	-123.6	-144.2	507.5	-138.48
14.00	31.09	3222.1	3215.1	3208.2	0.55	0.26	-0.25	28.59	-16.1	-33.2	-45.3	0.64	1.26	-75.5	-101.8	-123.1	-143.0	606.7	-139.93
15.00	27.37	3252.6	3245.3	3238.0	0.39	0.14	-0.29	28.57	-15.8	-33.7	-42.8	0.55	2.11	-76.0	-101.3	-122.7	-142.6	712.4	-141.19
16.00	22.04	3278.2	3270.9	3263.8	0.27	0.03	-0.42	28.57	-15.9	-34.9	-41.9	0.50	1.36	-75.5	-101.7	-122.8	-142.8	1000.0	-144.30

*at 25°C unless mentioned otherwise



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