

Coaxial

Voltage Controlled Oscillator

ZX95-2000+

5V Tuning for PLL IC's 2000 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- cellular infrastructure



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2000-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.
ZX95-2000+	2000		+1.5	-81	-106	-127	-147	1	3.9	22	60	70	-90	-20	-10	2	0.3	5	35

Maximum Ratings

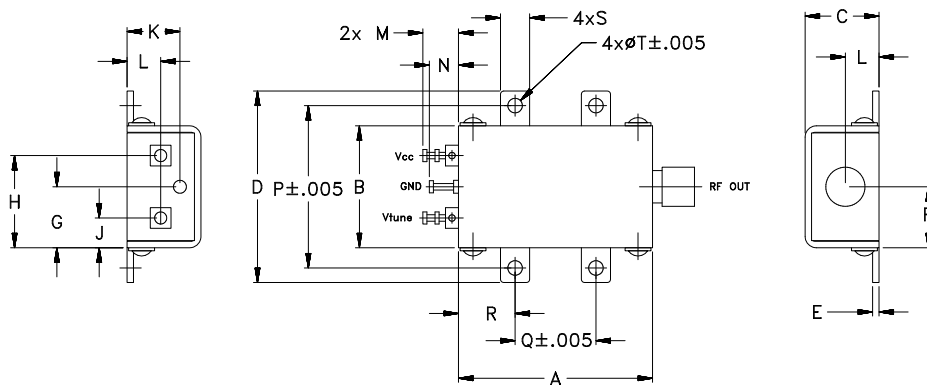
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	6V
All specifications	50 ohm system

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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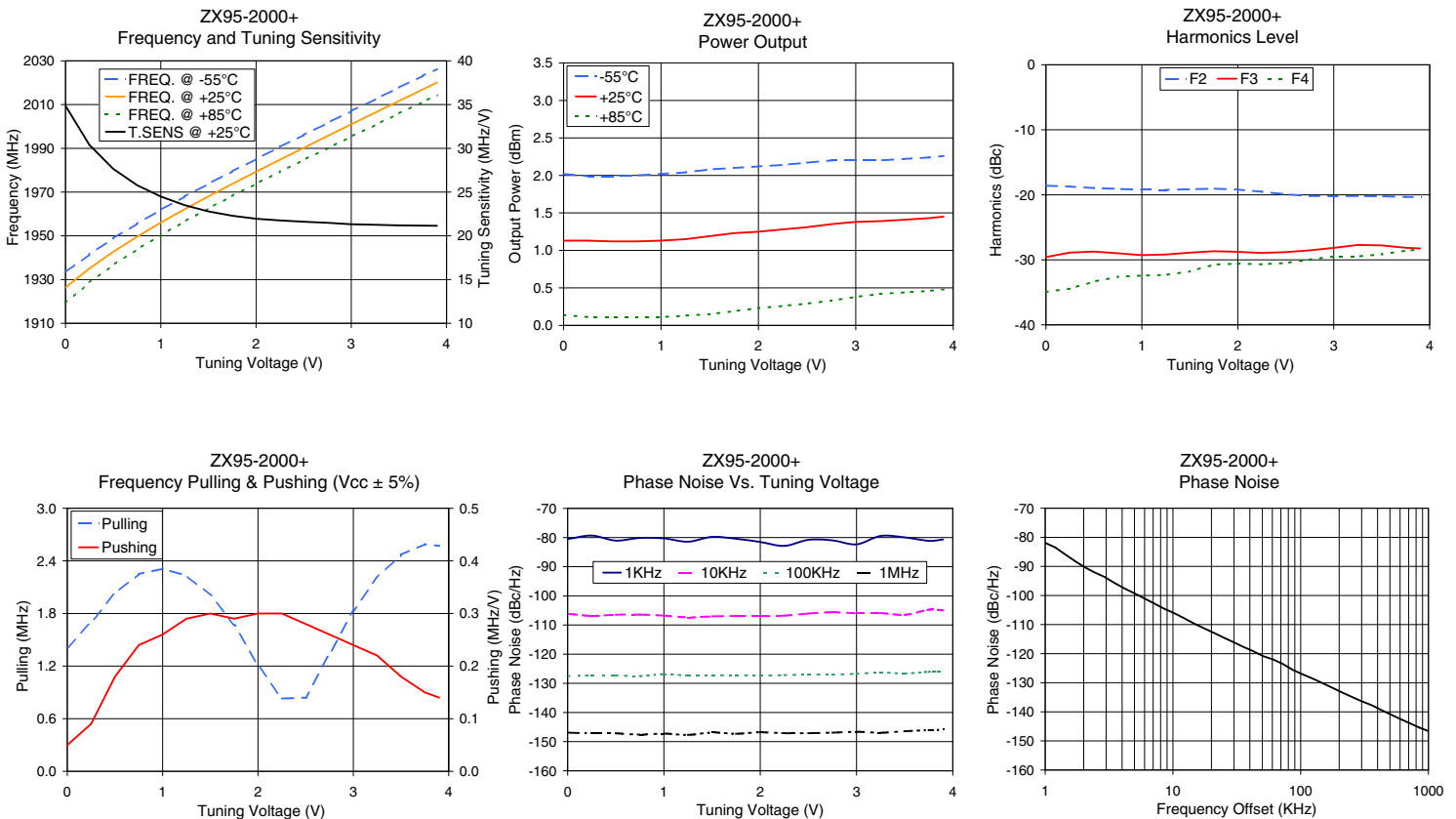
REV. C
M152326
EDR-8645/2F2
ZX95-2000+
RAV
150923
Page 1 of 2

Performance Data & Curves*

ZX95-2000+

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 2000 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	34.86	1933.3	1926.3	1919.3	2.02	1.13	0.14	26.05	-18.6	-29.6	-34.9	0.05	1.41	-80.5	-106.1	-127.5	-146.9	1.0	-81.91
0.25	30.40	1941.5	1935.0	1928.7	1.99	1.13	0.11	26.05	-18.7	-28.9	-34.4	0.09	1.70	-79.3	-106.9	-127.4	-147.2	2.0	-90.10
0.50	27.66	1948.8	1942.6	1936.6	1.99	1.12	0.11	26.05	-19.0	-28.7	-33.4	0.18	2.03	-81.1	-106.5	-127.3	-147.2	4.2	-97.66
0.75	25.80	1955.5	1949.6	1943.7	2.00	1.12	0.11	26.06	-19.1	-29.0	-32.6	0.24	2.25	-80.1	-106.4	-127.5	-147.6	6.0	-101.07
1.00	24.49	1961.9	1956.0	1950.3	2.02	1.13	0.11	26.06	-19.2	-29.3	-32.4	0.26	2.31	-80.3	-106.8	-126.9	-147.2	8.5	-104.52
1.25	23.51	1967.9	1962.1	1956.5	2.04	1.15	0.13	26.06	-19.2	-29.2	-32.3	0.29	2.23	-81.4	-107.4	-127.3	-147.7	10.2	-106.03
1.50	22.79	1973.8	1968.0	1962.5	2.08	1.19	0.15	26.07	-19.2	-28.9	-31.8	0.30	2.01	-79.8	-107.0	-127.3	-146.9	20.8	-112.81
1.75	22.29	1979.4	1973.7	1968.2	2.10	1.23	0.19	26.07	-19.1	-28.7	-30.7	0.29	1.67	-80.4	-106.9	-127.2	-147.3	42.5	-119.15
2.00	21.95	1985.1	1979.3	1973.8	2.12	1.25	0.23	26.08	-19.2	-28.8	-30.6	0.30	1.21	-81.5	-107.0	-127.3	-146.8	60.7	-121.98
2.25	21.76	1990.6	1984.8	1979.3	2.14	1.28	0.26	26.09	-19.5	-28.9	-30.7	0.30	0.83	-82.9	-106.8	-127.2	-147.1	86.7	-125.55
2.50	21.61	1996.1	1990.2	1984.7	2.17	1.31	0.29	26.10	-19.9	-28.8	-30.5	0.28	0.84	-80.8	-106.1	-127.0	-147.1	103.6	-127.12
2.75	21.48	2001.6	1995.6	1990.0	2.20	1.35	0.33	26.11	-20.2	-28.6	-30.0	0.26	1.34	-81.0	-105.6	-127.0	-146.9	302.4	-136.42
3.00	21.32	2007.0	2001.0	1995.4	2.20	1.38	0.38	26.12	-20.2	-28.2	-29.5	0.24	1.83	-82.4	-106.0	-126.7	-146.6	432.2	-139.49
3.25	21.26	2012.4	2006.3	2000.7	2.20	1.39	0.42	26.13	-20.2	-27.7	-29.5	0.22	2.21	-79.5	-105.9	-126.3	-146.9	507.5	-140.93
3.50	21.20	2017.7	2011.6	2005.9	2.22	1.41	0.44	26.14	-20.2	-27.8	-29.2	0.18	2.47	-79.9	-106.5	-126.6	-146.4	712.4	-143.88
3.75	21.16	2023.1	2016.9	2011.2	2.24	1.43	0.46	26.15	-20.3	-28.1	-28.6	0.15	2.59	-81.1	-104.8	-126.1	-146.1	851.6	-145.44
3.90	21.15	2026.3	2020.1	2014.3	2.26	1.45	0.48	26.16	-20.3	-28.3	-28.4	0.14	2.57	-80.7	-104.9	-126.0	-145.9	1000.0	-146.60

*at 25°C unless mentioned otherwise



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