

Coaxial

# Voltage Controlled Oscillator

## ZX95-3000+

5V Tuning for PLL IC's 2800 to 2970 MHz

### Features

- High power output, +10dBm typ.
- Linear tuning characteristics
- Low phase noise
- Low pushing
- Low pulling
- Protected by US patent 6,790,049



CASE STYLE: GB956

### Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Satellite systems

Connectors	Model	Price	Qty.
SMA	ZX95-3000-S+	\$44.95 ea.	(1-9)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

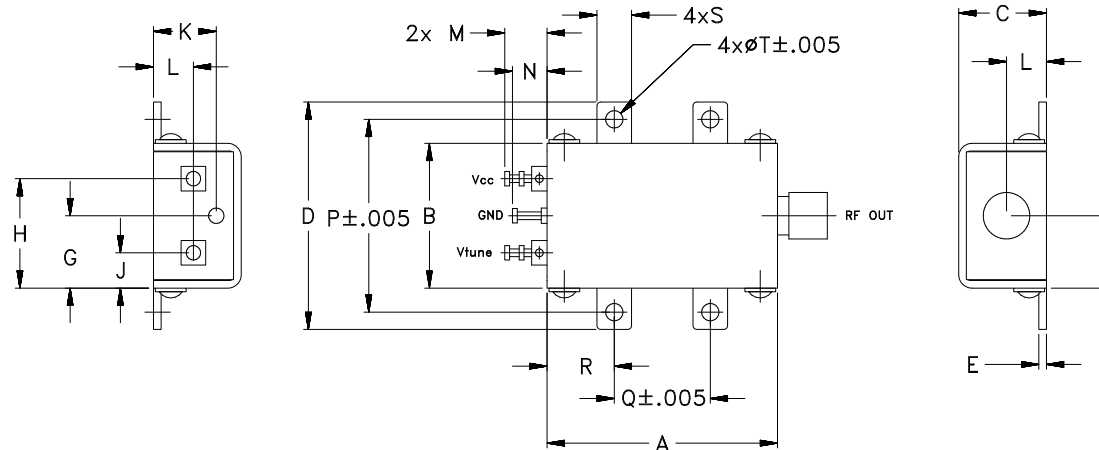
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, KHz				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.
ZX95-3000+	2800	2970	+10	-74	-102	-123	-144	0.5	5	59 - 65	10	280	-90	-25	-15	4	0.1	5	36

### Maximum Ratings

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

Permanent damage may occur if any of these limits are exceeded.

### 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	.45	.57	.18	.33	.21	.22	.18	1.00	.50	.35	.18	.106	GRAM
30.48	19.05	11.68	29.97	1.02	9.65	11.43	14.48	4.57	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0

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REV. OR  
 M108616  
 EDR-7852MP  
 ZX95-3000+  
 RAV  
 090902  
 page 1 of 2

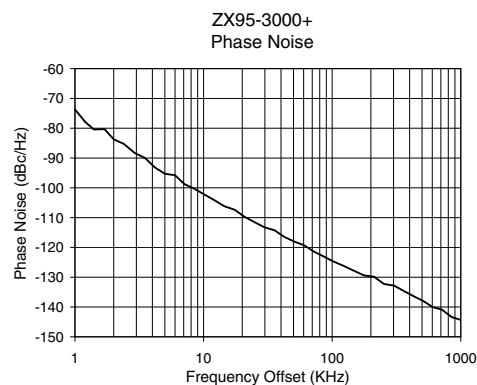
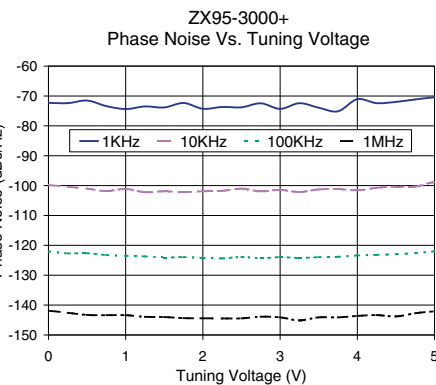
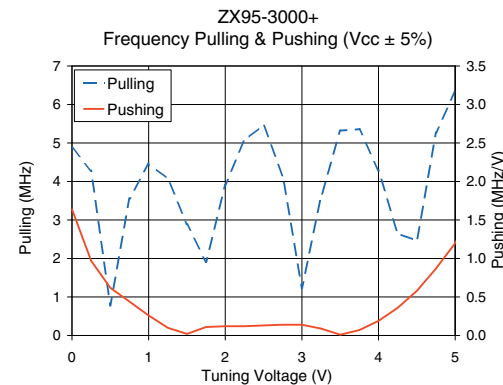
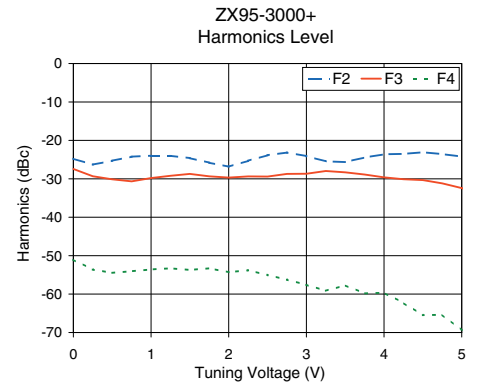
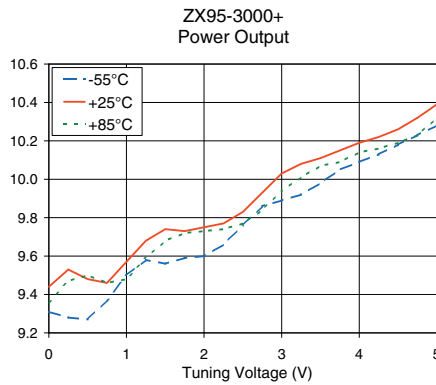
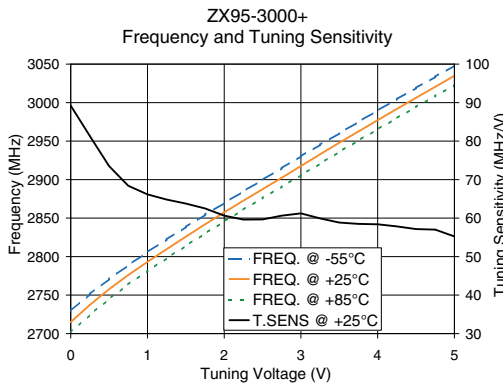
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# Performance Data & Curves\*

# ZX95-3000+

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 2885 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	89.21	2729.4	2715.0	2701.7	9.31	9.44	9.36	30.42	-24.8	-27.4	-51.1	1.64	4.88	-72.3	-99.8	-122.0	-141.8	1.0	-73.67
0.50	73.50	2770.9	2757.7	2744.9	9.27	9.48	9.50	30.46	-25.3	-30.1	-54.5	0.62	0.78	-71.5	-101.0	-122.6	-143.3	2.0	-83.72
0.75	68.41	2788.7	2776.0	2763.9	9.37	9.46	9.46	30.55	-24.2	-30.7	-54.0	0.44	3.56	-73.4	-101.8	-123.2	-143.4	3.5	-89.98
1.00	66.16	2805.7	2793.1	2781.3	9.50	9.57	9.48	30.58	-24.0	-29.8	-53.6	0.26	4.46	-74.4	-101.1	-123.5	-143.4	6.0	-95.77
1.25	64.82	2822.3	2809.7	2797.9	9.58	9.68	9.59	30.57	-24.0	-29.2	-53.3	0.10	4.07	-73.5	-102.2	-123.7	-143.9	8.5	-100.33
1.50	63.78	2838.5	2825.9	2814.0	9.56	9.74	9.68	30.58	-24.6	-28.7	-53.7	0.02	2.89	-73.8	-101.9	-124.1	-144.0	10.0	-102.09
1.75	62.50	2854.3	2841.8	2829.9	9.59	9.73	9.72	30.58	-25.8	-29.4	-53.3	0.11	1.91	-72.3	-102.2	-123.9	-144.4	20.8	-109.72
2.00	60.63	2869.6	2857.5	2845.7	9.60	9.75	9.73	30.61	-26.8	-29.7	-54.3	0.12	3.91	-74.3	-101.9	-124.2	-144.4	35.5	-114.22
2.25	59.62	2884.7	2872.6	2861.1	9.66	9.77	9.74	30.64	-25.3	-29.4	-53.8	0.12	5.07	-73.7	-101.8	-124.4	-144.5	60.7	-119.30
2.50	59.66	2899.7	2887.5	2876.1	9.76	9.83	9.77	30.64	-23.9	-29.4	-55.0	0.13	5.47	-73.8	-101.0	-123.9	-144.5	86.7	-123.10
2.75	60.65	2914.9	2902.4	2890.9	9.86	9.93	9.84	30.61	-23.2	-28.7	-56.2	0.14	4.14	-72.5	-101.9	-124.3	-143.9	100.0	-124.52
3.00	61.22	2930.3	2917.6	2905.8	9.89	10.03	9.94	30.57	-24.1	-28.7	-57.6	0.14	1.23	-74.3	-101.4	-123.9	-144.1	148.1	-127.85
3.25	59.92	2945.4	2932.9	2920.9	9.92	10.08	10.01	30.58	-25.5	-28.0	-59.1	0.09	3.60	-72.4	-102.2	-124.2	-145.1	177.0	-129.39
3.50	58.84	2960.2	2947.9	2936.1	9.98	10.11	10.07	30.59	-25.7	-28.3	-57.7	0.01	5.32	-73.9	-101.3	-123.9	-144.1	211.6	-129.83
3.75	58.50	2975.0	2962.6	2950.9	10.05	10.15	10.09	30.59	-24.5	-28.9	-59.8	0.07	5.36	-75.1	-101.2	-123.9	-144.1	302.4	-132.81
4.00	58.40	2989.8	2977.2	2965.4	10.09	10.19	10.14	30.57	-23.6	-29.6	-59.7	0.19	4.28	-71.1	-101.6	-123.4	-143.6	361.5	-134.63
4.25	57.84	3004.5	2991.8	2979.9	10.13	10.22	10.16	30.55	-23.5	-30.1	-62.3	0.36	2.65	-72.4	-100.7	-123.2	-143.3	507.5	-137.92
4.50	57.15	3019.0	3006.3	2994.3	10.18	10.26	10.19	30.52	-23.1	-30.3	-65.5	0.58	2.46	-72.0	-100.4	-122.9	-143.8	606.7	-140.04
4.75	57.00	3033.5	3020.6	3008.6	10.23	10.32	10.23	30.48	-23.6	-31.2	-65.4	0.87	5.27	-71.2	-100.3	-122.6	-142.7	851.6	-143.40
5.00	55.23	3048.0	3034.8	3022.5	10.28	10.39	10.32	30.44	-24.2	-32.4	-69.4	1.20	6.34	-70.4	-98.9	-122.0	-142.1	1000.0	-144.31

\*at 25°C unless mentioned otherwise



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