

Coaxial

# Voltage Controlled Oscillator

## ZX95-1005+

5V Tuning for PLL IC's 995 to 1030 MHz

### Features

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

### Applications

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



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-1005-S+	\$44.95 ea.	(1-9)

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

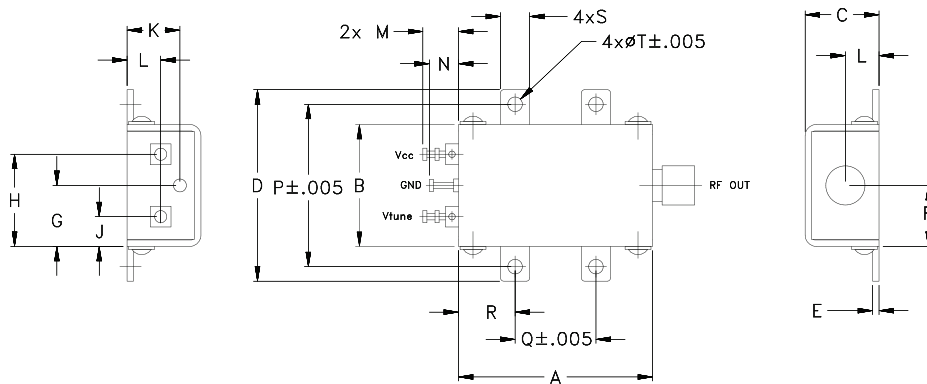
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-1005+	995	1030	+0.5	-84	-109	-129	-149	0.5	5	27	20	120	-90	-17	-10	0.5	0.5	5	32

### 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	.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



For detailed performance specs & shopping online see web site

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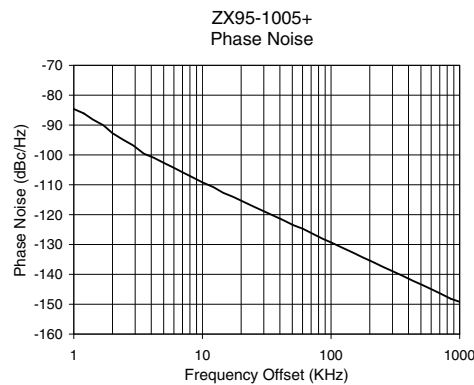
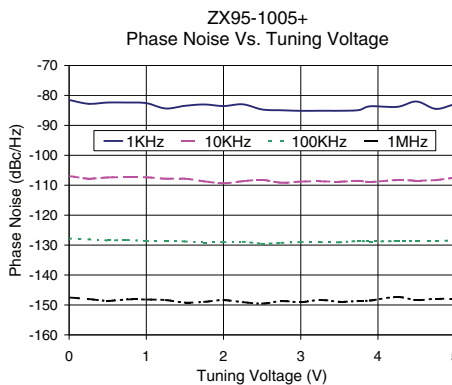
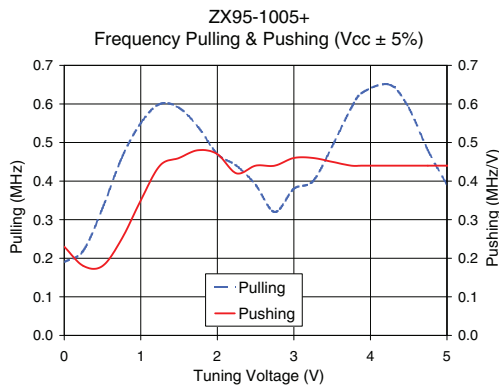
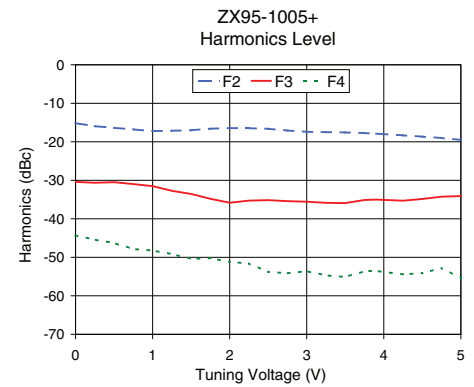
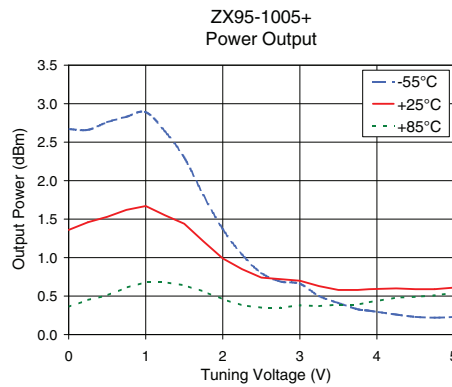
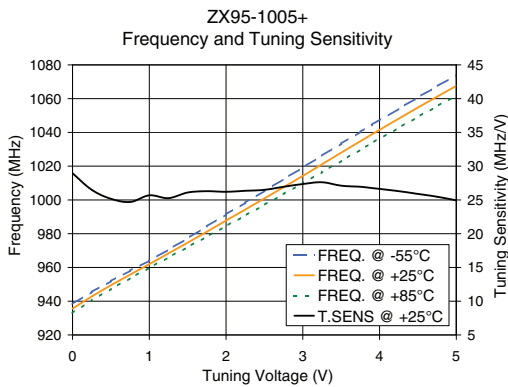
REV. OR  
M115794  
EDR-8644F2  
ZX95-1005+  
RAV  
120902  
Page 1 of 2

# Performance Data & Curves\*

# ZX95-1005+

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 1012 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	28.94	938.4	935.6	933.0	2.67	1.36	0.36	25.34	-15.2	-30.4	-44.3	0.23	0.19	-81.5	-106.9	-127.8	-147.5	1.0	-84.62
0.50	25.16	951.9	949.5	947.3	2.76	1.53	0.51	25.42	-16.4	-30.5	-46.3	0.18	0.33	-82.4	-107.4	-128.4	-148.6	2.0	-92.72
0.75	24.69	958.1	955.8	953.6	2.83	1.62	0.61	25.45	-16.8	-31.0	-47.9	0.25	0.46	-82.4	-107.3	-128.3	-148.2	3.5	-99.56
1.00	25.68	964.0	961.9	959.8	2.89	1.67	0.68	25.48	-17.2	-31.5	-48.2	0.35	0.55	-82.6	-107.4	-128.6	-148.2	6.0	-104.31
1.25	25.26	970.6	968.4	966.0	2.64	1.55	0.68	25.50	-17.1	-32.7	-49.2	0.44	0.60	-84.4	-107.8	-128.7	-148.4	8.5	-107.65
1.50	26.10	977.2	974.7	972.1	2.30	1.44	0.64	25.52	-17.0	-33.6	-50.4	0.46	0.59	-83.5	-107.8	-128.8	-149.2	10.0	-109.19
1.75	26.30	984.4	981.2	978.2	1.81	1.21	0.56	25.54	-16.6	-34.8	-50.2	0.48	0.54	-83.0	-108.7	-129.1	-149.0	20.8	-115.68
2.00	26.20	991.4	987.8	984.5	1.37	0.99	0.46	25.57	-16.4	-35.8	-51.2	0.47	0.47	-83.6	-109.3	-129.0	-148.4	35.5	-120.30
2.25	26.36	998.4	994.3	990.8	1.04	0.85	0.38	25.59	-16.5	-35.3	-51.6	0.42	0.44	-83.0	-108.7	-128.9	-149.1	60.7	-124.76
2.50	26.49	1005.4	1000.9	997.1	0.80	0.74	0.35	25.61	-16.6	-35.2	-53.8	0.44	0.39	-84.7	-108.3	-129.5	-149.5	86.7	-128.13
2.75	26.94	1012.3	1007.5	1003.5	0.69	0.72	0.35	25.64	-17.1	-35.4	-54.1	0.44	0.32	-85.0	-109.2	-129.3	-148.7	100.0	-129.29
3.00	27.36	1019.2	1014.3	1009.9	0.66	0.70	0.38	25.66	-17.4	-35.6	-53.6	0.46	0.38	-85.2	-108.8	-129.0	-149.1	148.1	-132.71
3.25	27.62	1026.3	1021.1	1016.5	0.50	0.63	0.37	25.69	-17.5	-35.8	-54.7	0.46	0.40	-85.1	-108.7	-129.0	-148.3	177.0	-134.34
3.50	27.11	1033.3	1028.0	1023.1	0.41	0.58	0.39	25.73	-17.6	-35.9	-55.1	0.45	0.49	-85.1	-108.8	-129.1	-148.9	211.6	-135.87
3.75	26.95	1040.3	1034.8	1029.8	0.33	0.58	0.39	25.77	-17.7	-35.1	-53.6	0.44	0.59	-84.9	-108.5	-128.6	-148.7	302.4	-139.01
3.90	26.76	1044.5	1038.8	1033.7	0.31	0.59	0.42	25.79	-17.9	-35.0	-53.5	0.44	0.63	-83.6	-108.9	-128.8	-148.5	361.5	-140.51
4.25	26.29	1054.1	1048.2	1042.8	0.26	0.60	0.48	25.84	-18.3	-35.3	-54.4	0.44	0.65	-83.8	-108.3	-128.6	-147.3	507.5	-143.47
4.50	25.89	1060.8	1054.8	1049.2	0.23	0.59	0.49	25.88	-18.7	-34.9	-54.1	0.44	0.59	-82.0	-108.5	-128.6	-148.4	606.7	-145.03
4.75	25.47	1067.4	1061.2	1055.6	0.22	0.59	0.51	25.92	-19.0	-34.3	-52.8	0.44	0.48	-84.5	-108.3	-128.6	-147.9	851.6	-148.14
5.00	24.94	1073.8	1067.6	1061.8	0.23	0.61	0.54	25.96	-19.5	-34.1	-55.4	0.44	0.39	-82.9	-107.5	-128.5	-148.1	1000.0	-149.21

\*at 25°C unless mentioned otherwise



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