

Coaxial

# Voltage Controlled Oscillator

## ZX95-3220+

5V Tuning for PLL IC's 3050 to 3220 MHz

### Features

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

### Applications

- r & d
- lab
- instrumentation
- wireless communications



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-3220-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

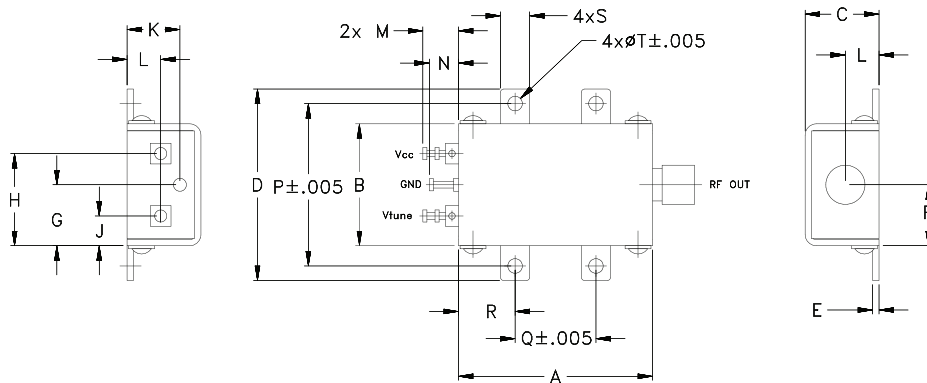
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, KHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Typ.	Max.
ZX95-3220+	3050	3220	+2.5	-71	-96	-117	-137	0.5	5	74	12	340	-90	-20	-10	1	2.5	5	37

### 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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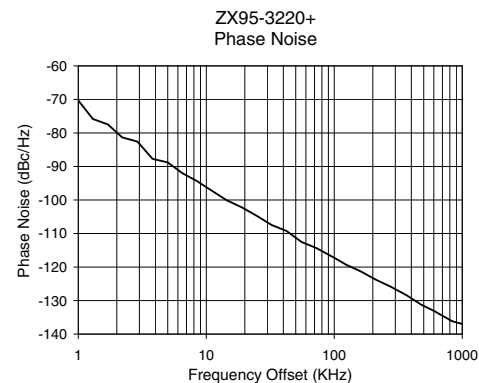
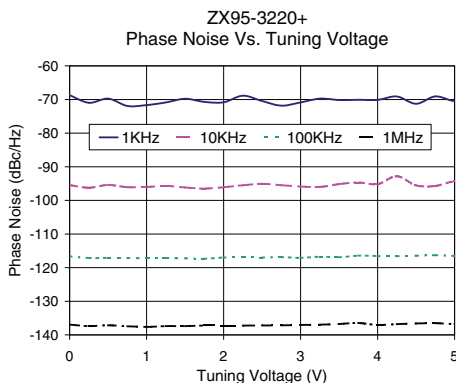
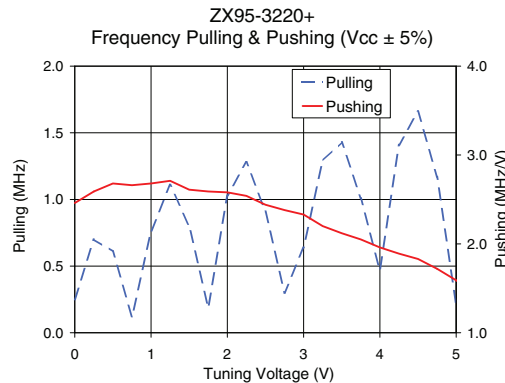
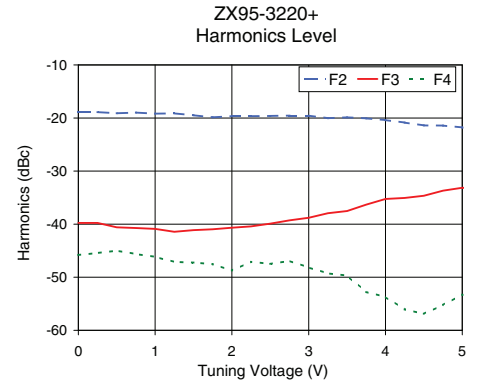
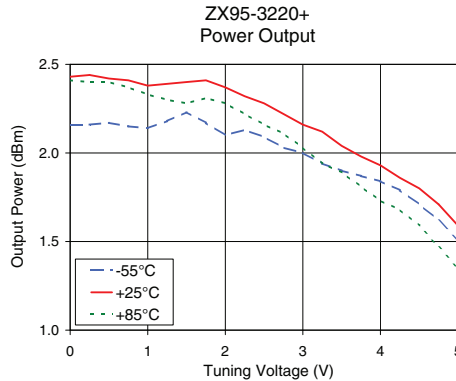
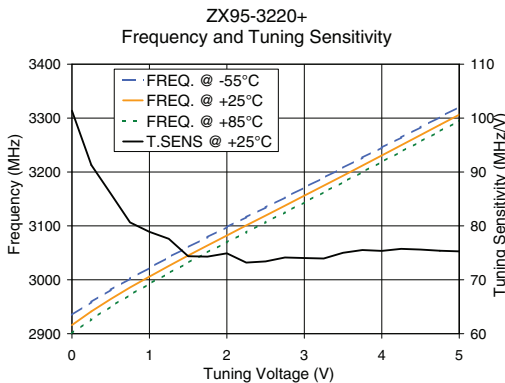
REV. OR  
M108877  
EDR-7422  
ZX95-3220+  
RAV  
120905  
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# Performance Data & Curves\*

# ZX95-3220+

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 3110 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	101.37	2934.8	2916.1	2900.6	2.16	2.43	2.41	32.30	-18.9	-39.8	-45.8	2.46	0.25	-68.7	-95.5	-116.6	-137.0	1.0	-70.31
0.50	86.00	2981.3	2964.2	2950.2	2.17	2.42	2.40	32.23	-19.1	-40.6	-45.0	2.68	0.61	-69.7	-95.4	-117.1	-137.1	2.2	-81.31
0.75	80.64	3002.0	2985.7	2972.0	2.15	2.41	2.37	32.19	-19.0	-40.7	-45.6	2.66	0.12	-71.9	-96.1	-117.1	-137.4	3.8	-87.72
1.00	78.90	3021.9	3005.9	2992.6	2.14	2.38	2.33	32.16	-19.2	-40.9	-46.2	2.68	0.76	-71.7	-96.0	-117.2	-137.6	6.5	-92.02
1.25	77.61	3041.9	3025.6	3012.3	2.18	2.39	2.30	32.10	-19.1	-41.4	-47.1	2.71	1.11	-70.9	-95.7	-117.2	-137.4	8.5	-94.41
1.50	74.37	3060.5	3045.0	3031.8	2.23	2.40	2.28	32.09	-19.5	-41.1	-47.2	2.61	0.80	-69.8	-96.2	-117.2	-137.4	10.0	-96.18
1.75	74.30	3079.0	3063.6	3051.0	2.17	2.41	2.31	32.04	-19.9	-41.0	-47.5	2.59	0.19	-70.7	-96.5	-117.4	-137.2	24.8	-104.73
2.00	74.91	3097.7	3082.2	3069.4	2.10	2.37	2.28	32.00	-19.7	-40.7	-48.7	2.58	1.03	-70.8	-96.1	-117.0	-137.2	42.4	-109.24
2.25	73.18	3116.2	3100.9	3088.0	2.13	2.32	2.22	31.94	-19.7	-40.4	-47.1	2.54	1.28	-68.9	-95.5	-117.0	-137.2	55.4	-112.51
2.50	73.40	3134.3	3119.2	3106.8	2.09	2.28	2.16	31.89	-19.6	-39.9	-47.5	2.44	0.91	-70.5	-95.1	-117.0	-137.2	72.3	-114.32
2.75	74.14	3152.6	3137.5	3125.2	2.03	2.22	2.11	31.84	-19.6	-39.3	-46.9	2.38	0.30	-71.8	-95.5	-116.9	-137.2	100.0	-117.25
3.00	74.03	3171.1	3156.1	3143.6	2.00	2.16	2.03	31.79	-19.6	-38.8	-48.2	2.33	0.64	-70.9	-95.9	-117.1	-137.1	123.6	-119.29
3.25	73.94	3189.4	3174.6	3162.4	1.94	2.12	1.94	31.74	-20.0	-37.9	-49.3	2.20	1.29	-69.7	-96.0	-116.7	-137.0	161.5	-121.31
3.50	75.01	3207.8	3193.1	3181.0	1.90	2.04	1.89	31.69	-19.9	-37.5	-49.7	2.12	1.43	-70.2	-95.2	-116.9	-136.8	211.0	-123.77
3.75	75.52	3226.6	3211.8	3199.7	1.87	1.98	1.81	31.63	-20.1	-36.3	-52.8	2.05	1.01	-70.1	-94.7	-116.4	-136.5	275.7	-125.85
4.00	75.36	3245.2	3230.7	3218.7	1.84	1.93	1.73	31.58	-20.4	-35.3	-53.7	1.96	0.47	-70.1	-95.2	-116.6	-137.0	366.8	-128.41
4.25	75.74	3264.0	3249.6	3237.7	1.79	1.86	1.68	31.53	-20.9	-35.1	-56.0	1.89	1.41	-69.1	-92.8	-116.6	-136.8	479.4	-131.27
4.50	75.60	3282.9	3268.5	3256.6	1.71	1.80	1.59	31.48	-21.4	-34.6	-56.9	1.83	1.66	-71.3	-95.5	-116.5	-136.6	600.0	-133.06
4.75	75.39	3301.8	3287.4	3275.7	1.62	1.71	1.47	31.44	-21.4	-33.7	-55.2	1.72	1.17	-69.1	-95.7	-116.3	-136.5	833.4	-136.15
5.00	75.27	3320.6	3306.2	3294.6	1.51	1.59	1.35	31.40	-21.8	-33.1	-53.3	1.59	0.21	-70.5	-94.4	-116.5	-136.7	1000.0	-137.00

\*at 25°C unless mentioned otherwise



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