

Coaxial

# Voltage Controlled Oscillator

## ZX95-730A+

Linear Tuning 655 to 730 MHz

### Features

- 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 communication
- WiMAX

Connectors	Model
SMA	ZX95-730A-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)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Max.	Typ.	Max.
ZX95-730A+	655	730	+1.2	-89	-113	-133	-153	0.5	9	11-15	45	45	-90	-23	-14	0.4	0.1	5	25

### Maximum Ratings

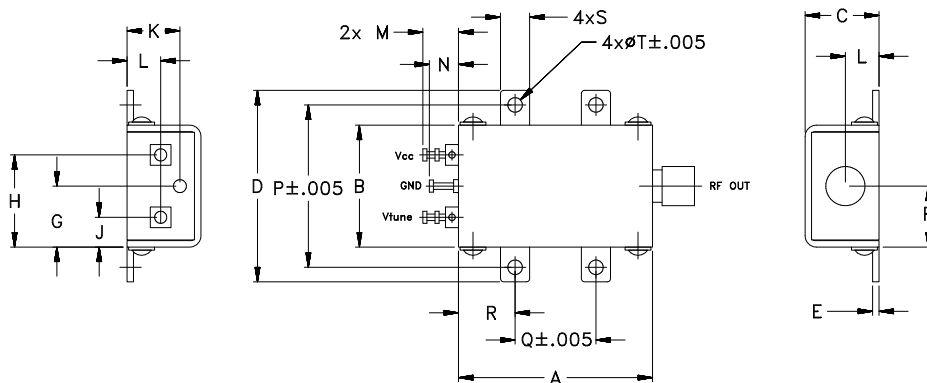
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	11V
All specifications	50 ohm system

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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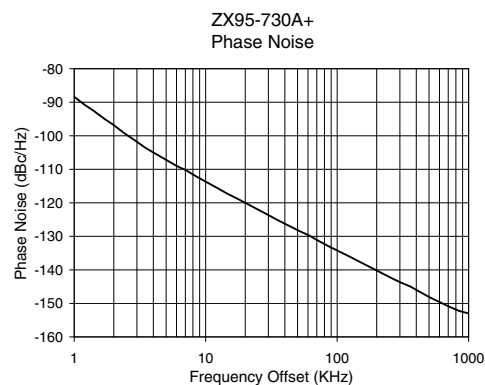
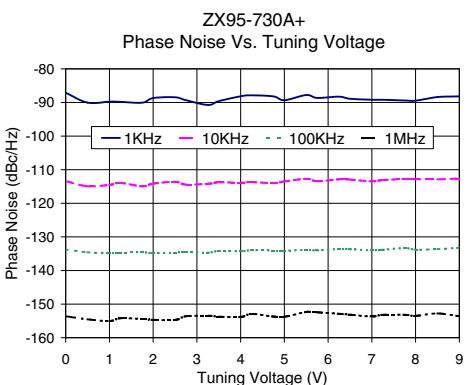
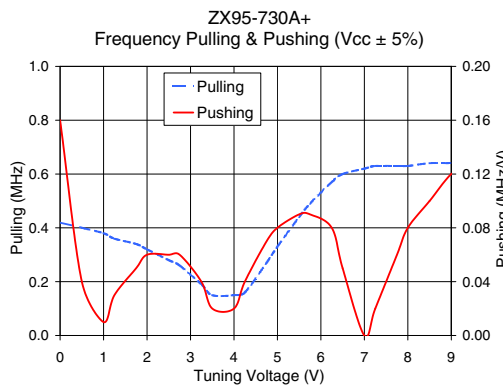
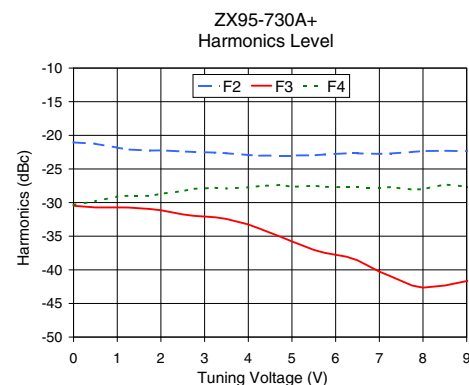
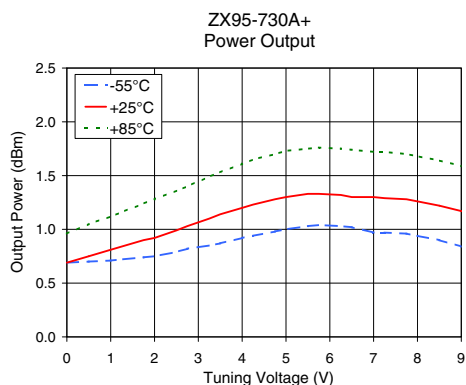
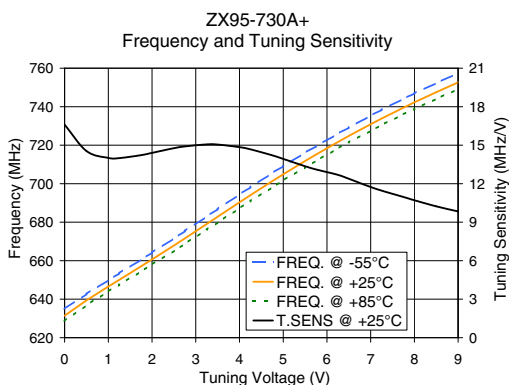
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# Performance Data & Curves\*

# ZX95-730A+

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 693 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	16.61	635.0	631.4	628.7	0.69	0.69	0.96	12.98	-21.1	-30.5	-30.4	0.16	0.42	-87.1	-113.4	-133.7	-153.6	1.0	-88.36
0.50	14.54	642.7	639.4	636.9	0.70	0.75	1.05	13.02	-21.3	-30.7	-29.8	0.04	0.40	-90.0	-114.9	-134.6	-154.5	2.0	-96.81
1.00	14.01	649.9	646.6	644.1	0.71	0.81	1.12	13.07	-21.8	-30.7	-29.1	0.01	0.38	-89.8	-114.5	-134.8	-155.0	3.5	-103.68
1.25	13.99	653.5	650.1	647.5	0.72	0.84	1.16	13.10	-22.1	-30.7	-29.0	0.03	0.36	-89.8	-113.9	-134.7	-154.3	6.0	-108.98
1.75	14.22	660.6	657.1	654.5	0.74	0.90	1.24	13.14	-22.3	-31.0	-29.0	0.05	0.34	-90.1	-115.0	-134.6	-154.4	8.5	-112.17
2.00	14.40	664.2	660.6	658.0	0.75	0.92	1.28	13.17	-22.2	-31.1	-28.7	0.06	0.32	-88.7	-114.2	-134.8	-154.7	10.0	-113.69
2.50	14.77	671.6	667.9	665.1	0.79	0.99	1.36	13.21	-22.4	-31.8	-28.3	0.06	0.28	-88.5	-113.6	-134.7	-154.7	20.8	-120.34
2.75	14.91	675.4	671.6	668.8	0.82	1.03	1.40	13.22	-22.5	-32.0	-28.0	0.06	0.26	-89.3	-114.4	-134.5	-153.6	35.5	-125.23
3.50	15.05	686.8	682.8	679.8	0.87	1.14	1.53	13.29	-22.7	-32.4	-27.9	0.02	0.15	-89.6	-113.8	-134.2	-153.7	60.7	-129.69
4.00	14.85	694.4	690.3	687.3	0.92	1.20	1.61	13.33	-22.9	-33.3	-27.7	0.02	0.15	-88.2	-113.9	-134.3	-153.8	86.7	-133.03
4.25	14.67	698.2	694.0	690.9	0.94	1.23	1.65	13.34	-23.0	-33.9	-27.6	0.04	0.16	-87.9	-113.7	-134.0	-152.9	100.0	-134.21
4.75	14.21	705.6	701.3	698.2	0.98	1.28	1.70	13.37	-23.0	-35.1	-27.4	0.07	0.27	-88.2	-114.0	-134.1	-153.7	148.1	-137.60
5.00	13.93	709.2	704.9	701.7	1.00	1.30	1.73	13.39	-23.0	-35.8	-27.7	0.08	0.33	-89.3	-113.5	-134.1	-153.8	177.0	-139.12
5.50	13.36	716.1	711.8	708.5	1.03	1.33	1.75	13.41	-23.0	-37.0	-27.5	0.09	0.44	-87.8	-112.7	-133.9	-152.3	211.6	-140.69
5.75	13.11	719.5	715.1	711.9	1.04	1.33	1.76	13.41	-22.9	-37.5	-27.7	0.09	0.49	-88.7	-113.4	-134.0	-152.4	302.4	-143.71
6.50	12.38	729.1	724.8	721.5	1.02	1.30	1.74	13.44	-22.7	-38.6	-27.7	0.05	0.60	-88.9	-112.9	-133.7	-153.1	361.5	-145.00
7.00	11.74	735.4	730.9	727.5	0.97	1.30	1.72	13.45	-22.8	-40.3	-27.8	0.00	0.62	-89.2	-113.5	-134.0	-153.7	507.5	-148.22
7.75	10.97	744.1	739.5	736.1	0.96	1.28	1.70	13.46	-22.5	-42.3	-28.1	0.06	0.63	-89.4	-112.8	-133.3	-153.2	606.7	-149.68
8.00	10.71	746.9	742.2	738.8	0.94	1.26	1.68	13.46	-22.3	-42.7	-28.0	0.08	0.63	-89.5	-112.9	-133.8	-153.5	851.6	-152.28
9.00	9.84	757.4	752.6	749.1	0.84	1.17	1.59	13.43	-22.4	-41.7	-27.6	0.12	0.64	-88.2	-112.7	-133.2	-153.5	1000.0	-153.02

\*at 25°C unless mentioned otherwise



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