

Coaxial

# Voltage Controlled Oscillator

## ZX95-4040+

Linear Tuning 3685 to 4040 MHz

### Features

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

### Applications

- r & d
- lab
- instrumentation
- wireless communication
- WiMAX



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-4040-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 Br (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.			Typ.	Max.	Typ.
ZX95-4040+	3685	4040	+6	-70	-96	-117	-138	1	18	39-54	20	170	-90	-20	-10	5	0.5	8	43

### Maximum Ratings

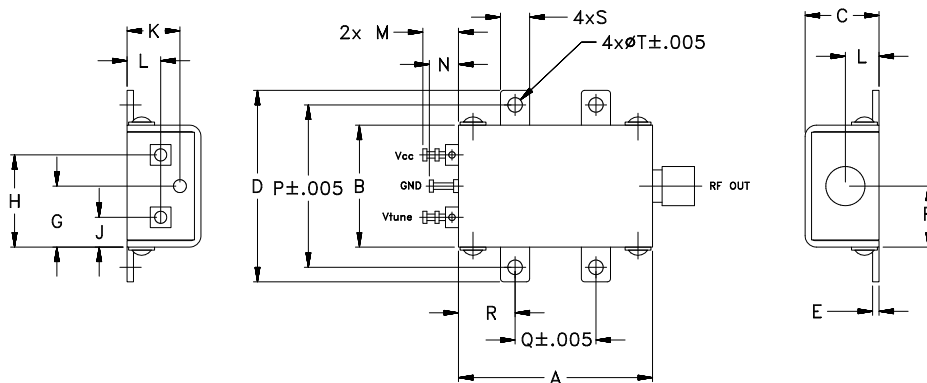
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	9V
Absolute Max. Tuning Voltage (Vtune)	20V
All specifications	50 ohm system

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. B  
M169213  
EDR-7633/1F2  
ZX95-4040+  
RAV  
180815  
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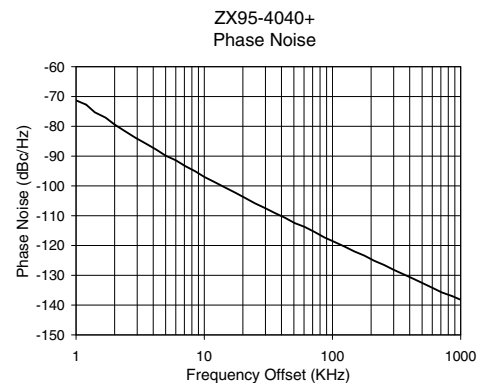
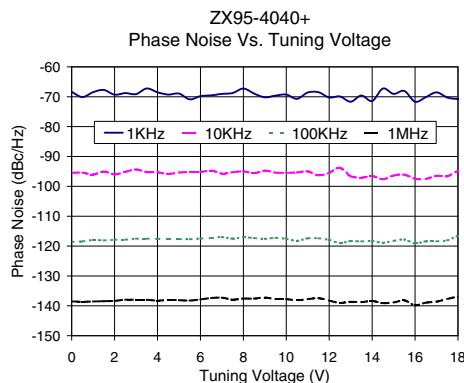
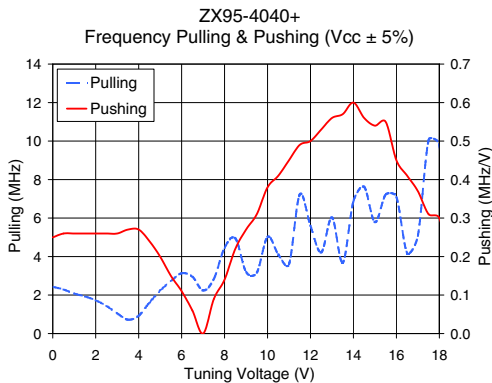
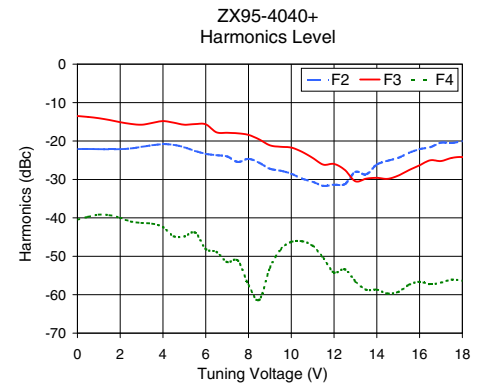
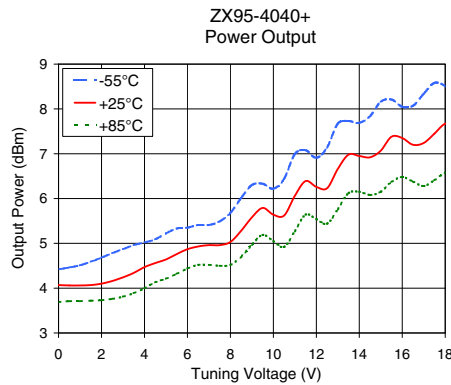
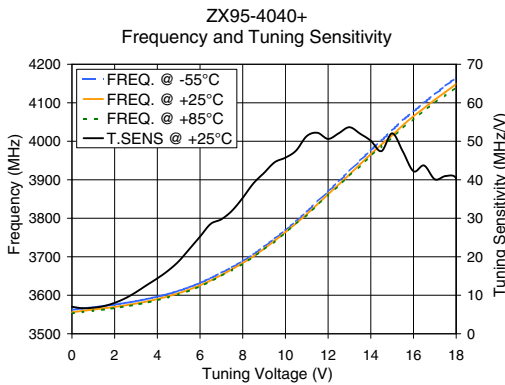
# NON-CATALOG

## Performance Data & Curves\*

## ZX95-4040+

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 3910MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	7.01	3562.2	3556.0	3553.0	4.42	4.07	3.69	37.49	-22.1	-13.5	-40.5	0.25	2.43	-68.4	-95.5	-118.6	-138.5	1.0	-71.29
0.50	6.63	3565.6	3559.5	3556.5	4.46	4.06	3.71	37.49	-22.1	-13.7	-39.7	0.26	2.29	-70.1	-95.4	-118.4	-138.6	2.0	-79.42
1.00	6.77	3568.8	3562.8	3559.8	4.51	4.06	3.71	37.48	-22.1	-14.1	-39.2	0.26	2.08	-68.5	-96.0	-118.0	-138.5	3.5	-85.80
2.00	8.03	3575.7	3569.8	3566.9	4.68	4.10	3.73	37.47	-22.1	-15.1	-40.0	0.26	1.73	-69.3	-96.0	-117.9	-138.4	6.0	-91.40
3.00	10.80	3584.5	3578.4	3575.4	4.87	4.24	3.81	37.44	-21.5	-15.8	-41.3	0.26	1.05	-69.1	-94.4	-117.5	-138.0	8.5	-95.10
4.00	14.39	3596.2	3590.1	3587.0	5.02	4.47	4.00	37.41	-20.8	-14.8	-42.4	0.27	0.93	-68.5	-95.3	-117.6	-138.3	10.0	-96.98
5.00	18.82	3611.3	3605.5	3602.6	5.22	4.64	4.21	37.37	-21.6	-15.8	-44.8	0.20	2.23	-68.9	-95.4	-117.7	-138.1	20.8	-104.04
6.00	25.24	3631.9	3625.9	3623.2	5.35	4.87	4.44	37.31	-23.3	-15.7	-48.1	0.11	3.13	-69.8	-95.2	-117.5	-137.9	35.5	-109.10
7.00	29.74	3658.3	3652.8	3650.2	5.41	4.96	4.52	37.22	-24.0	-17.9	-51.5	0.00	2.24	-69.0	-95.7	-117.0	-137.3	60.7	-113.76
8.00	35.31	3688.7	3683.6	3681.8	5.68	5.03	4.52	37.13	-24.6	-18.4	-57.5	0.14	4.45	-67.3	-95.0	-117.1	-137.6	86.7	-117.32
9.00	41.79	3726.0	3720.8	3719.0	6.30	5.58	4.97	37.00	-27.2	-21.1	-53.0	0.27	3.20	-70.2	-94.7	-117.6	-137.2	100.0	-118.49
10.00	45.75	3768.8	3764.0	3762.6	6.22	5.64	5.05	36.88	-28.5	-21.7	-46.3	0.38	5.02	-69.3	-95.5	-117.6	-137.8	148.1	-121.98
11.00	51.35	3816.8	3810.6	3808.7	6.99	6.06	5.27	36.76	-30.6	-24.4	-47.3	0.45	3.60	-68.6	-95.0	-117.4	-137.8	177.0	-123.37
12.00	50.62	3869.5	3862.4	3860.1	6.91	6.26	5.54	36.67	-31.4	-26.0	-54.2	0.50	5.59	-70.3	-95.5	-118.0	-138.2	211.6	-125.14
13.00	53.66	3922.7	3913.8	3910.0	7.67	6.66	5.76	36.58	-28.1	-30.5	-56.5	0.56	6.02	-71.7	-96.6	-118.4	-138.6	302.4	-128.22
14.00	50.14	3976.7	3966.6	3961.7	7.69	6.95	6.15	36.53	-26.2	-29.6	-58.7	0.60	6.87	-71.4	-96.6	-118.3	-138.4	361.5	-129.75
15.00	52.05	4028.4	4015.4	4009.8	8.16	7.07	6.15	36.47	-24.4	-29.0	-59.3	0.54	5.79	-69.0	-96.4	-118.2	-138.9	507.5	-132.67
16.00	42.21	4077.0	4065.1	4058.7	8.05	7.35	6.48	36.45	-22.1	-26.3	-56.6	0.45	7.09	-71.7	-97.5	-119.1	-139.8	606.7	-134.27
17.00	40.11	4122.1	4108.0	4100.2	8.34	7.24	6.28	36.41	-20.4	-25.2	-56.9	0.37	5.07	-68.6	-96.5	-118.4	-138.6	851.6	-136.92
18.00	40.39	4165.1	4148.6	4140.0	8.51	7.67	6.58	36.38	-20.1	-24.2	-56.4	0.30	9.79	-70.8	-95.0	-116.8	-137.1	1000.0	-138.20

\*at 25°C unless mentioned otherwise



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