

Coaxial

# Voltage Controlled Oscillator

## ZX95-1074+

5V Tuning for PLL IC's 1067 to 1074 MHz

### Features

- Linear tuning characteristics
- Low phase noise
- Low pulling
- Low pushing
- Protected by US patent 6,790,049



CASE STYLE: GB956

### Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Cellular Infrastructure

Connectors	Model	Price	Qty.
SMA	ZX95-1074-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

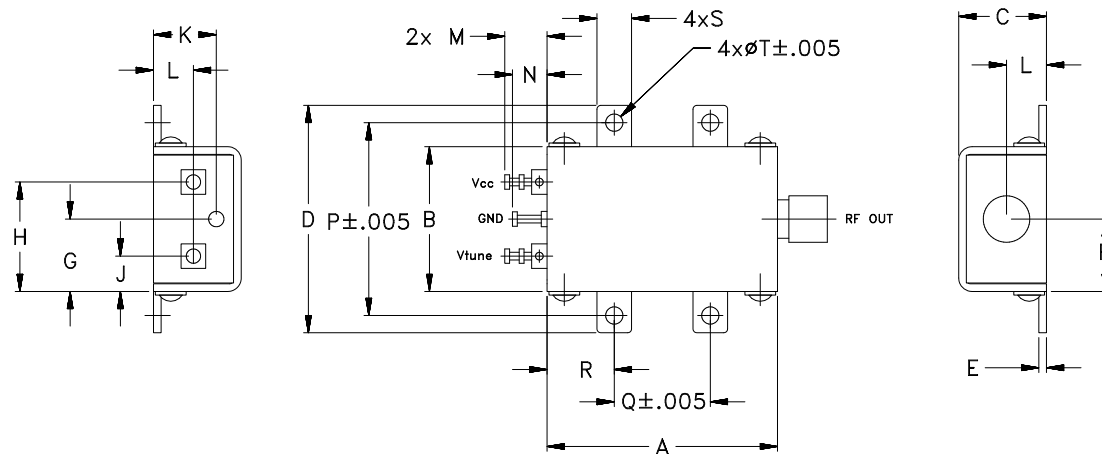
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-1074+	1067	1074	-0.1	-81	-106	-127	-147	0.5	4.5	29	20	100	-90	-17	-10	0.4	0.4	5	35

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6.5V
Absolute Max. Tuning Voltage (Vtune)	6.5V
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



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

REV. OR  
M120402  
EDR-8600F2  
ZX95-1074+  
RAV  
090830  
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# Performance Data & Curves\*

# ZX95-1074+

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 1071 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	32.57	1011.7	1007.7	1004.6	0.18	-0.06	-0.25	24.97	-15.9	-32.8	-29.9	0.84	0.26	-79.1	-105.7	-126.4	-146.5	1.0	-80.14
0.25	29.89	1019.9	1015.9	1012.8	0.00	-0.10	-0.23	24.99	-16.1	-33.1	-29.8	0.71	0.41	-80.1	-105.4	-126.6	-146.8	2.0	-90.73
0.50	28.53	1027.6	1023.4	1020.2	-0.14	-0.12	-0.20	25.01	-16.2	-33.0	-30.4	0.64	0.51	-80.3	-106.0	-126.8	-146.6	3.5	-96.01
0.75	27.75	1034.9	1030.5	1027.1	-0.24	-0.13	-0.17	25.03	-16.5	-31.8	-30.8	0.58	0.57	-82.0	-106.5	-126.7	-147.4	6.0	-101.31
1.00	27.42	1042.1	1037.4	1033.9	-0.31	-0.12	-0.14	25.05	-16.5	-30.9	-30.7	0.53	0.58	-81.7	-105.9	-127.0	-146.8	8.5	-105.15
1.25	27.35	1049.1	1044.3	1040.6	-0.38	-0.13	-0.11	25.06	-16.7	-30.3	-31.2	0.49	0.57	-81.0	-106.5	-127.4	-147.6	10.0	-106.39
1.50	27.51	1056.2	1051.1	1047.2	-0.42	-0.13	-0.09	25.09	-17.0	-29.9	-31.7	0.46	0.51	-79.4	-106.6	-127.4	-147.9	20.8	-113.21
1.75	27.77	1063.3	1058.0	1053.9	-0.46	-0.12	-0.07	25.11	-17.2	-29.0	-32.0	0.43	0.43	-80.5	-106.3	-127.5	-146.7	35.5	-118.06
2.00	28.09	1070.5	1064.9	1060.6	-0.50	-0.12	-0.04	25.12	-17.4	-28.7	-32.2	0.41	0.32	-80.7	-107.3	-127.2	-146.9	60.7	-122.75
2.25	28.56	1077.8	1072.0	1067.4	-0.54	-0.13	-0.03	25.14	-17.6	-27.9	-33.0	0.40	0.17	-79.6	-106.6	-127.2	-147.1	86.7	-125.89
2.50	28.80	1085.1	1079.1	1074.4	-0.56	-0.13	-0.03	25.16	-17.6	-27.5	-34.1	0.38	0.01	-82.6	-106.3	-127.1	-146.6	100.0	-127.16
2.75	29.25	1092.6	1086.3	1081.4	-0.58	-0.12	-0.01	25.18	-17.8	-27.3	-33.5	0.39	0.16	-82.7	-107.1	-127.1	-146.7	148.1	-130.60
3.00	29.45	1100.1	1093.6	1088.5	-0.60	-0.13	0.00	25.20	-18.0	-27.0	-34.7	0.39	0.34	-78.6	-106.2	-127.0	-146.8	211.6	-133.74
3.25	29.60	1107.6	1101.0	1095.7	-0.62	-0.13	0.00	25.22	-18.2	-26.3	-35.7	0.40	0.50	-79.7	-105.9	-127.0	-146.5	302.4	-136.83
3.50	29.61	1115.2	1108.4	1102.9	-0.62	-0.13	0.01	25.24	-18.5	-26.0	-36.2	0.42	0.62	-81.8	-106.4	-127.1	-146.9	361.5	-138.47
3.75	29.45	1122.8	1115.8	1110.1	-0.62	-0.13	0.01	25.26	-18.7	-25.8	-36.4	0.44	0.68	-82.9	-106.7	-126.7	-146.5	507.5	-141.28
3.90	29.31	1127.3	1120.2	1114.4	-0.62	-0.12	0.02	25.27	-18.8	-25.7	-37.0	0.45	0.67	-82.2	-106.3	-126.8	-146.2	606.7	-142.82
4.25	28.93	1137.8	1130.4	1124.5	-0.61	-0.10	0.04	25.30	-19.2	-25.6	-38.4	0.48	0.60	-79.6	-106.2	-126.5	-146.3	851.6	-145.61
4.50	28.55	1145.2	1137.7	1131.6	-0.58	-0.08	0.06	25.32	-19.4	-24.9	-38.2	0.49	0.48	-79.7	-105.0	-126.4	-146.4	1000.0	-146.98

\*at 25°C unless mentioned otherwise

