

Coaxial

# Voltage Controlled Oscillator

## ZX95-3075+

Linear Tuning 2920 to 3075 MHz

### Features

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

### Applications

- R&D
- LAB
- Instrumentation
- Point-to-point communication
- Radio location



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-3075-S+	\$40.95 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

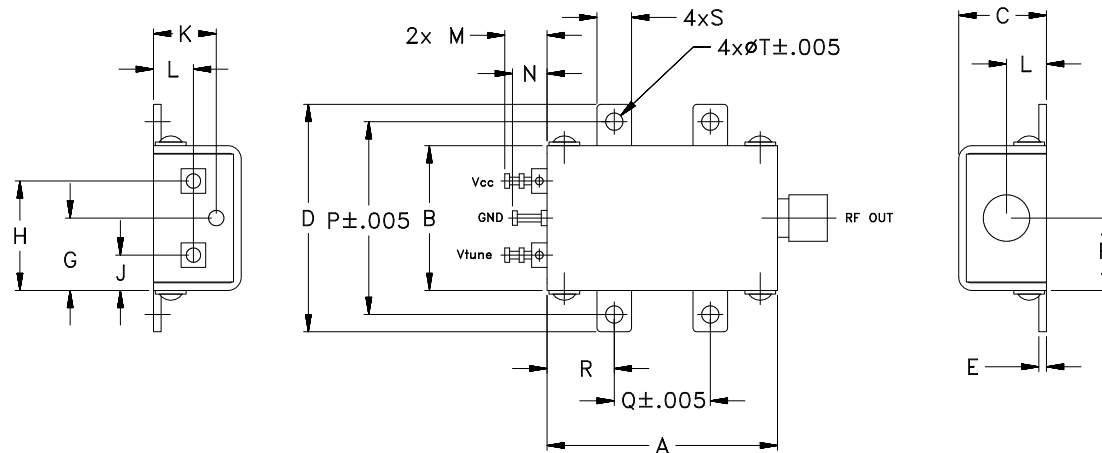
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, KHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Vcc (volts)
ZX95-3075+	2920	3075	+3	-78	-102	-123	-143	0.5	11	24 - 28	20	30	-90	-19	-10	0.7	2.5	8	40

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	10V
Absolute Max. Tuning Voltage (Vtune)	13V
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

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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)

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

**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).

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EDR-8250  
ZX95-3075+  
RAV  
090902  
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# Performance Data & Curves\*

# ZX95-3075+

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 2998 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	34.72	2852.7	2840.3	2830.0	3.16	3.16	3.04	32.91	-20.9	-36.2	-40.0	2.12	0.76	-78.2	-101.5	-123.1	-143.6	1.0	-78.62
0.50	29.47	2869.4	2857.7	2847.9	3.13	3.12	3.04	32.90	-20.8	-37.3	-41.7	2.25	0.66	-79.2	-102.5	-122.9	-143.4	2.0	-88.28
1.00	26.66	2883.6	2872.4	2863.0	3.17	3.08	2.98	32.94	-20.1	-36.9	-40.3	2.25	0.49	-77.6	-102.2	-123.2	-142.5	3.5	-93.04
1.50	25.35	2896.7	2885.8	2876.5	3.21	3.13	2.96	32.97	-20.2	-38.2	-41.4	2.25	0.59	-78.1	-102.3	-123.4	-143.0	6.0	-96.76
2.00	24.77	2909.3	2898.4	2889.2	3.27	3.16	3.00	32.99	-19.6	-38.2	-41.2	2.28	0.72	-78.2	-102.2	-123.9	-142.7	8.5	-100.62
2.50	24.40	2921.6	2910.8	2901.6	3.29	3.23	3.03	33.02	-19.8	-37.8	-42.4	2.29	0.80	-79.3	-103.0	-123.8	-142.7	10.0	-101.84
3.00	24.50	2933.8	2923.0	2913.8	3.28	3.24	3.09	33.03	-19.7	-38.3	-41.1	2.29	0.71	-77.1	-102.1	-123.4	-142.9	20.8	-108.59
3.50	24.93	2946.3	2935.3	2926.0	3.27	3.24	3.10	33.04	-19.2	-38.3	-41.6	2.33	0.71	-77.8	-102.1	-123.4	-142.9	35.5	-113.96
4.00	25.16	2958.9	2947.7	2938.3	3.27	3.22	3.08	33.05	-19.4	-39.0	-41.8	2.34	0.49	-79.0	-102.5	-123.4	-143.0	60.7	-118.41
4.50	25.30	2971.5	2960.3	2950.8	3.29	3.20	3.06	33.06	-19.0	-39.8	-40.6	2.37	0.51	-77.1	-101.7	-123.1	-143.3	86.7	-122.16
5.00	25.52	2984.2	2973.0	2963.4	3.29	3.21	3.04	33.07	-19.0	-40.2	-40.6	2.36	0.75	-78.3	-103.0	-123.2	-143.4	100.0	-123.67
5.50	25.75	2996.9	2985.7	2976.1	3.31	3.20	3.04	33.09	-18.8	-39.3	-40.6	2.37	0.82	-77.9	-102.5	-123.4	-144.1	148.1	-126.64
6.00	26.49	3010.0	2998.6	2989.0	3.30	3.22	3.02	33.10	-18.4	-39.4	-41.1	2.38	0.77	-78.4	-101.9	-123.4	-143.0	177.0	-128.43
6.50	26.88	3023.2	3011.8	3002.0	3.32	3.21	3.05	33.11	-18.7	-38.5	-39.0	2.43	0.71	-80.1	-101.8	-123.1	-142.9	211.6	-130.31
7.00	27.45	3036.8	3025.3	3015.5	3.36	3.24	3.04	33.14	-18.6	-38.7	-39.0	2.42	0.65	-79.2	-102.4	-123.1	-142.7	302.4	-132.10
7.50	27.97	3050.5	3039.0	3029.1	3.37	3.26	3.07	33.16	-18.1	-38.4	-39.9	2.43	0.60	-78.2	-101.7	-123.8	-142.9	361.5	-134.09
8.00	28.24	3064.6	3053.0	3043.0	3.41	3.28	3.08	33.19	-17.8	-37.6	-38.8	2.45	0.77	-77.6	-101.8	-122.9	-142.9	507.5	-137.52
9.00	28.15	3093.1	3081.2	3071.1	3.36	3.29	3.12	33.24	-17.9	-38.0	-35.4	2.48	0.66	-77.4	-101.7	-123.2	-143.0	606.7	-138.88
10.00	25.75	3121.0	3108.9	3098.5	3.35	3.21	3.04	33.30	-17.5	-39.1	-35.3	2.46	0.60	-78.1	-102.5	-123.3	-143.4	851.6	-142.60
11.00	21.84	3145.7	3133.6	3123.3	3.36	3.22	3.02	33.36	-17.1	-39.8	-34.6	2.47	0.68	-78.1	-102.5	-123.4	-143.2	1000.0	-143.35

\*at 25°C unless mentioned otherwise

