

# Voltage Controlled Oscillator

## ZX95-1900V

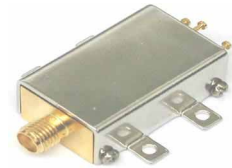
Linear Tuning 1450 to 1900 MHz

### Features

- Low Phase Noise
- Low Pushing
- Protected by US Patent 6,790,049

### Applications

- R & D
- Lab
- Instrumentation
- Test Equipment



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-1900V-S	\$42.95 ea.	(1-9)

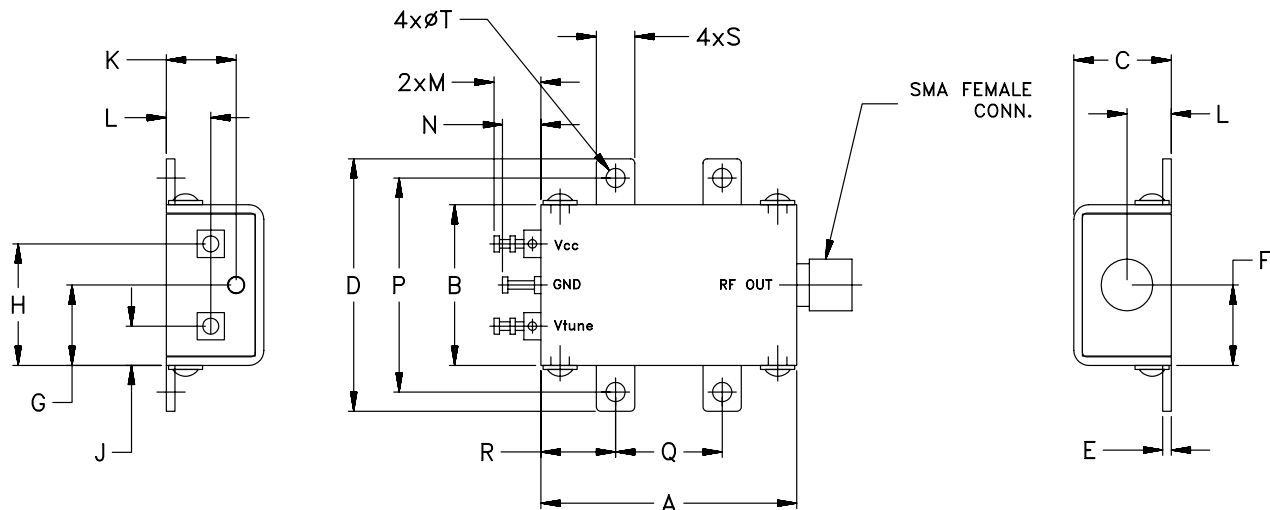
### Electrical Specifications

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 <sub>r</sub> (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.
ZX95-1900V	1450	1900	8.0	-79	-104	-125	-145	0.5	20.0	25.0-41.0	140	70.0	-90	-20.0	-10.0	10.0	1.0	5.0	25

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (V <sub>cc</sub> )	6V
Absolute Max. Tuning Voltage (V <sub>tune</sub> )	22V
All specifications	50 ohm system

### 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	.09	grams
30.50	19.10	11.6	30.0	1.0	9.6	11.4	14.5	4.7	8.3	5.3	5.6	4.6	25.4	12.7	8.9	4.6	2.3	35.0

# Performance Data & Curves\*

# ZX95-1900V

V TUNE	TUNING SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			I <sub>cc</sub> (mA)	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)	FREQ. PULLING (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (kHz)	PHASE NOISE at 1675 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1 kHz	10 kHz	100 kHz	1 MHz		
0.0	38.2	1370.6	1358.3	1348.3	9.8	9.4	8.6	21	-15.2	-19.9	-32.2	0.85	9.45	-76.4	-102.7	-124.3	-144.1	1.00	-79.8
1.0	34.4	1405.7	1394.7	1385.7	9.5	9.2	8.5	21	-15.6	-19.0	-28.5	1.05	5.24	-78.2	-103.5	-125.4	-144.7	2.00	-90.0
2.0	37.5	1441.3	1430.1	1420.9	9.1	8.9	8.2	21	-15.6	-19.6	-28.6	1.20	5.76	-78.2	-104.2	-125.2	-144.8	3.50	-93.9
3.0	39.4	1479.0	1467.9	1459.0	8.9	8.7	8.1	20	-15.8	-18.7	-27.6	1.11	7.79	-78.9	-104.5	-125.4	-145.0	6.00	-99.2
5.0	38.1	1559.1	1548.3	1539.3	8.3	8.2	7.7	20	-17.5	-18.8	-28.9	0.83	10.79	-79.0	-104.4	-125.1	-145.2	8.50	-103.8
7.0	34.9	1633.0	1622.6	1613.8	7.8	7.8	7.4	20	-19.5	-18.5	-29.5	0.79	10.91	-81.3	-104.2	-125.0	-145.3	10.00	-103.9
8.0	32.9	1667.5	1657.1	1648.4	7.6	7.6	7.3	20	-19.1	-17.3	-27.3	0.85	5.16	-78.8	-103.6	-125.0	-145.0	20.80	-111.0
9.0	31.7	1699.9	1689.5	1680.9	7.4	7.5	7.2	20	-22.4	-18.2	-29.1	0.84	2.92	-80.5	-104.5	-125.3	-145.1	35.50	-115.7
11.0	29.9	1761.9	1751.5	1742.9	7.0	7.2	7.0	20	-24.9	-20.8	-31.4	0.76	4.95	-79.5	-105.1	-124.9	-145.3	60.70	-121.6
12.0	28.4	1791.0	1781.0	1772.6	6.9	7.1	6.8	20	-24.0	-23.0	-33.2	0.73	2.57	-79.3	-103.6	-125.0	-145.0	86.70	-124.3
13.0	28.6	1819.5	1809.3	1800.8	6.7	7.0	6.8	20	-25.6	-23.3	-38.8	0.74	7.22	-78.0	-104.2	-124.9	-144.5	100.00	-125.4
14.0	27.5	1848.3	1837.8	1828.9	6.6	6.8	6.5	20	-25.4	-21.4	-40.6	0.83	4.77	-79.5	-103.1	-124.2	-144.5	211.60	-132.1
15.0	26.1	1875.4	1865.0	1856.0	6.6	6.8	6.5	20	-24.7	-19.5	-40.9	0.89	5.09	-79.6	-104.3	-124.7	-144.4	361.50	-136.6
16.0	24.7	1901.2	1890.7	1881.7	6.6	6.8	6.5	20	-24.6	-19.5	-41.6	0.89	9.89	-79.7	-103.8	-124.4	-145.2	507.50	-139.2
17.0	24.4	1926.1	1915.2	1906.1	6.5	6.7	6.5	20	-22.5	-18.4	-37.5	0.88	1.57	-78.7	-104.1	-124.2	-144.5	600.00	-141.1
18.0	23.2	1950.5	1939.4	1929.9	6.4	6.6	6.4	20	-22.2	-18.2	-34.9	0.86	7.79	-77.0	-103.9	-124.5	-144.2	851.60	-144.0
20.0	20.5	1994.2	1983.0	1973.4	6.5	6.7	6.4	20	-19.5	-17.5	-32.3	0.59	10.61	-79.7	-104.0	-124.7	-145.1	1000.00	-145.2

\*at 25°C unless mentioned otherwise

