Coaxial

Voltage Controlled Oscillator ZX95-2490C+

Linear Tuning 2020 to 2490 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- wire-line broadband access

CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-2490C-S+	$ 40.95 ea.	(1-9)

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

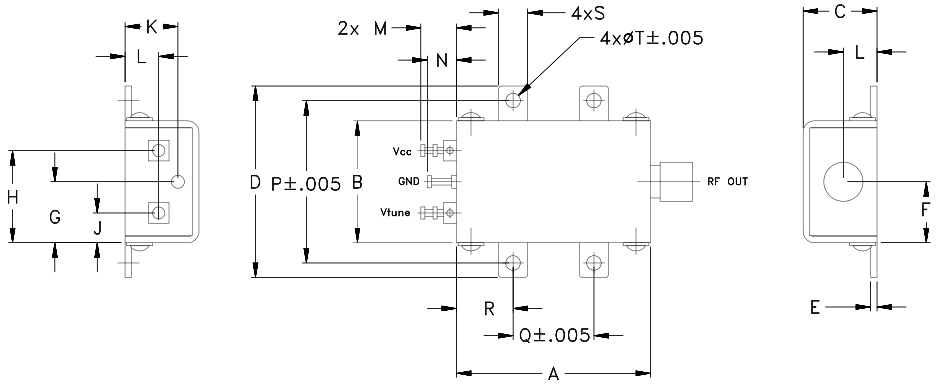
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies,kHz Typ.				TUNING VOLTAGE RANGE (V)		SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dBr (MHz)	PUSHING (MHz/V)	DC OPERATING POWER Vcc (volts)	DC OPERATING POWER Current (mA)
	Min.	Max.	Typ.	1	10	100	1000	Min.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Typ.		Max.
ZX95-2490C+	2020	2490	+7.2	-79	-107	-128	-149	0.25	16	30-40	30	45	-90	-32	-15	2.5	0.4	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)	18V
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**	**.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

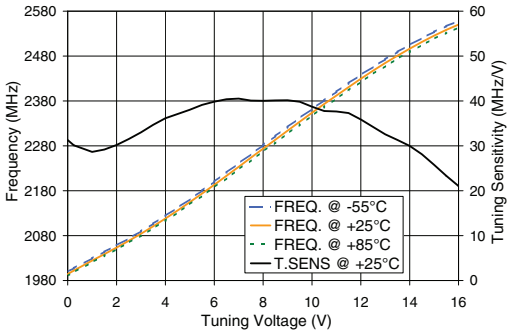
Performance Data & Curves*

ZX95-2490C+

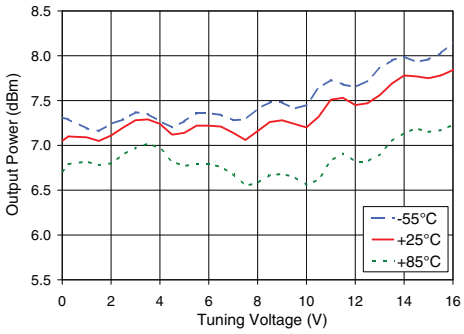
V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 2255 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	31.29	1999.8	1994.3	1990.3	7.31	7.05	6.71	32.93	-36.9	-31.3	-60.1	1.12	1.57	-82.1	-110.0	-131.2	-151.6	1.0	-78.81
0.25	30.12	2007.4	2002.2	1998.3	7.29	7.10	6.79	32.90	-37.2	-30.3	-60.3	1.05	1.53	-82.5	-110.0	-131.4	-151.6	2.0	-88.29
1.00	28.65	2029.5	2024.5	2020.7	7.19	7.09	6.82	32.75	-38.3	-29.3	-62.2	0.88	1.94	-80.6	-109.7	-131.2	-151.1	3.5	-95.57
2.00	30.19	2058.5	2053.4	2049.5	7.24	7.11	6.80	32.53	-34.8	-27.9	-64.7	0.82	2.49	-81.7	-108.7	-130.1	-150.5	6.0	-101.55
3.00	33.01	2089.8	2084.2	2080.1	7.37	7.28	6.97	32.30	-32.1	-26.8	-67.5	0.79	1.47	-79.4	-107.7	-129.7	-149.7	8.5	-105.54
4.00	36.15	2124.2	2118.1	2113.5	7.27	7.24	6.97	32.07	-30.2	-25.4	-69.8	0.73	2.79	-78.5	-107.2	-129.3	-149.1	10.0	-107.09
5.00	38.04	2161.1	2154.7	2149.8	7.27	7.14	6.77	31.91	-29.5	-24.8	-75.5	0.64	1.65	-79.2	-107.1	-129.2	-149.3	20.8	-114.46
6.00	39.84	2200.3	2193.3	2187.9	7.36	7.22	6.79	31.78	-29.4	-26.2	-66.2	0.52	2.82	-80.6	-107.2	-129.0	-149.3	35.5	-119.46
7.00	40.53	2240.9	2233.4	2227.6	7.28	7.14	6.68	31.67	-31.1	-28.7	-67.0	0.37	1.96	-79.0	-107.0	-128.8	-148.8	60.7	-123.68
7.50	40.09	2261.3	2253.7	2247.7	7.29	7.06	6.55	31.65	-31.8	-29.6	-62.4	0.30	3.00	-79.9	-107.1	-128.7	-148.8	86.7	-127.52
8.00	40.03	2281.5	2273.7	2267.6	7.41	7.16	6.58	31.63	-32.3	-31.5	-63.1	0.24	3.14	-78.6	-107.3	-129.0	-148.9	100.0	-128.74
9.00	40.15	2322.0	2313.8	2307.3	7.48	7.28	6.68	31.59	-34.3	-33.5	-51.0	0.14	3.11	-79.6	-106.9	-128.6	-148.7	148.1	-132.19
10.00	38.72	2362.2	2353.8	2347.1	7.45	7.20	6.56	31.58	-34.9	-35.9	-50.5	0.06	2.79	-78.2	-106.7	-128.4	-148.8	177.0	-133.78
11.00	37.66	2400.6	2392.0	2385.3	7.73	7.51	6.83	31.58	-35.3	-38.5	-50.2	0.01	2.96	-78.9	-106.8	-128.5	-149.0	211.6	-135.22
12.00	35.88	2438.2	2429.5	2422.4	7.65	7.45	6.82	31.57	-35.0	-40.3	-49.7	0.00	2.14	-79.6	-106.6	-128.1	-147.9	302.4	-138.17
13.00	32.57	2473.0	2464.5	2457.7	7.86	7.56	6.90	31.61	-34.8	-41.5	-51.1	0.07	3.58	-78.1	-106.9	-128.4	-148.4	361.5	-139.84
13.50	31.31	2489.3	2480.8	2474.0	7.95	7.69	7.05	31.61	-34.3	-43.0	-50.8	0.12	2.82	-79.9	-106.9	-128.4	-148.4	507.5	-142.57
14.00	29.98	2505.1	2496.5	2489.5	7.99	7.78	7.14	31.60	-33.9	-43.6	-50.4	0.18	2.40	-78.7	-106.6	-128.2	-148.1	606.7	-144.40
15.00	25.77	2534.0	2525.5	2518.6	7.96	7.75	7.15	31.61	-33.0	-43.9	-51.1	0.28	3.25	-80.9	-107.0	-128.2	-147.8	851.6	-147.31
16.00	21.04	2558.2	2550.1	2543.3	8.14	7.84	7.23	31.63	-31.6	-45.7	-50.5	0.31	2.99	-81.0	-107.2	-128.4	-148.4	1000.0	-148.44

*at 25°C unless mentioned otherwise

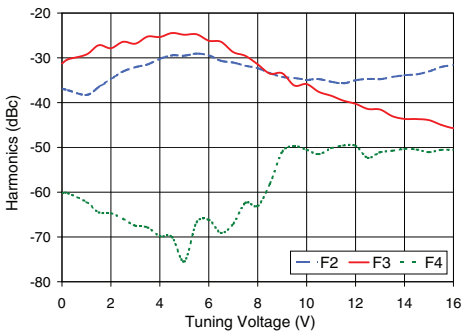
ZX95-2490C+
Frequency and Tuning Sensitivity



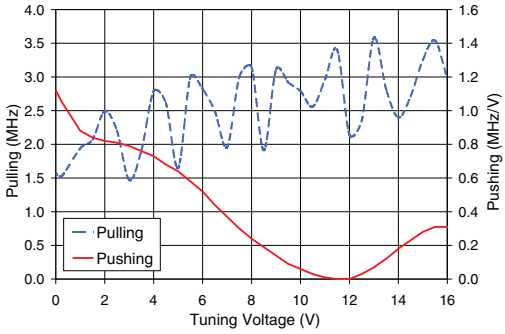
ZX95-2490C+
Power Output



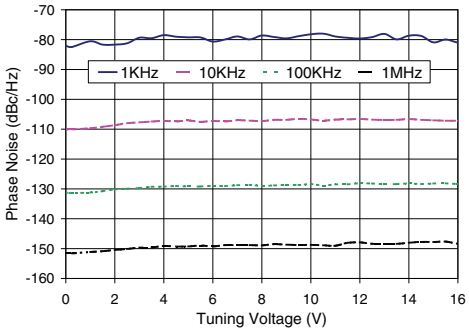
ZX95-2490C+
Harmonics Level



ZX95-2490C+
Frequency Pulling & Pushing (Vcc ± 5%)



ZX95-2490C+
Phase Noise Vs. Tuning Voltage



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Phase Noise