Coaxial

Voltage Controlled Oscillator

ZX95-2490+

Linear Tuning 2280 to 2490 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- military & avionics

CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2490-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 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.
ZX95-2490+	2280	2490	+9	-76	-102	-123	-143	0.5	10	27 - 37	20	120	-90	-18	-11	3	2	5	38

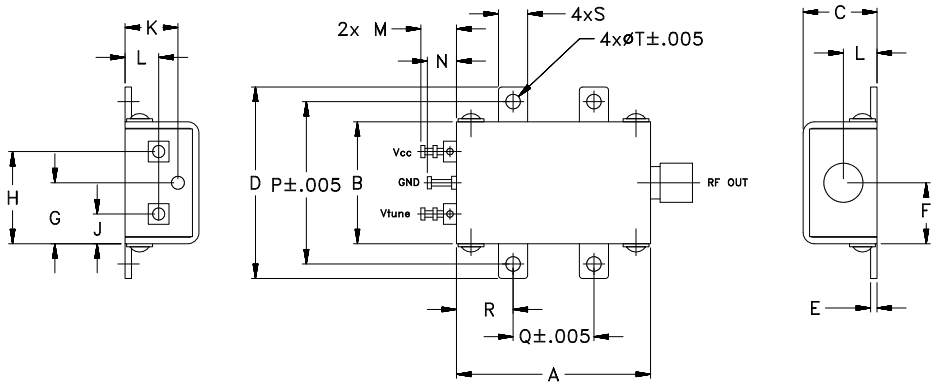
Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	12V
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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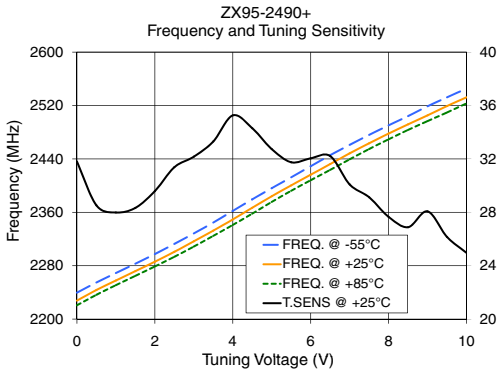
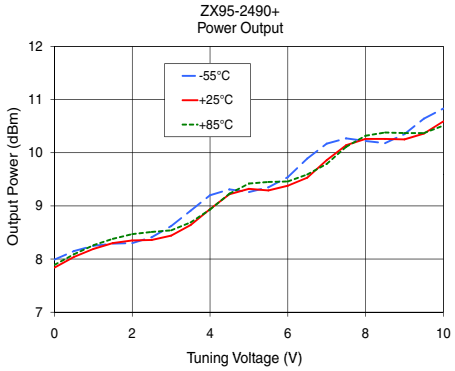
Performance Data & Curves*

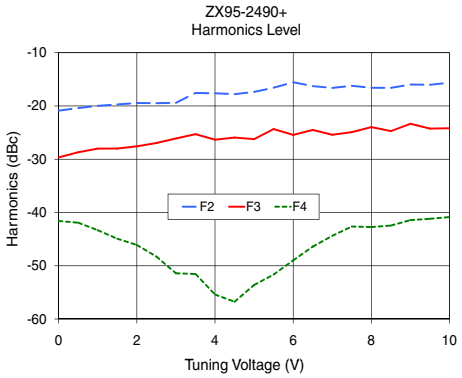
ZX95-2490+

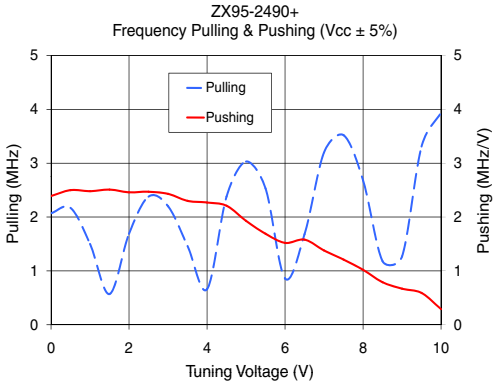
V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (kHz)	PHASE NOISE at 2385 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	31.80	2239.6	2227.7	2220.6	7.99	7.84	7.89	30.29	-20.9	-29.7	-41.6	2.39	2.07	-77.75	-101.8	-122.6	-142.1	1.0	-75.77
0.50	28.53	2254.9	2243.6	2236.3	8.15	8.04	8.09	30.42	-20.4	-28.7	-41.9	2.50	2.17	-77.86	-102.1	-122.5	-142.1	2.0	-84.13
1.00	27.99	2269.1	2257.9	2250.9	8.25	8.19	8.26	30.57	-20.0	-28.0	-43.3	2.48	1.50	-78.52	-102.1	-123.2	-142.5	3.5	-90.15
1.50	28.33	2283.1	2271.9	2264.7	8.29	8.30	8.38	30.71	-19.7	-28.0	-44.9	2.51	0.57	-78.30	-102.1	-123.2	-142.7	6.0	-96.57
2.00	29.59	2297.4	2286.0	2278.8	8.30	8.35	8.47	30.86	-19.4	-27.6	-46.1	2.46	1.69	-78.24	-102.5	-123.6	-143.0	8.5	-100.53
2.50	31.38	2312.6	2300.8	2293.3	8.41	8.36	8.51	31.03	-19.5	-27.0	-48.3	2.47	2.38	-77.70	-102.1	-123.5	-142.8	10.0	-102.29
3.00	32.17	2328.4	2316.5	2308.7	8.62	8.44	8.54	31.21	-19.4	-26.1	-51.4	2.43	2.20	-77.30	-102.1	-123.7	-143.0	20.8	-109.48
3.50	33.31	2344.7	2332.6	2324.7	8.91	8.64	8.69	31.37	-17.6	-25.3	-51.6	2.30	1.46	-75.25	-102.6	-123.7	-143.3	35.5	-114.36
4.00	35.26	2362.2	2349.2	2341.0	9.20	8.94	8.93	31.47	-17.6	-26.3	-55.4	2.27	0.66	-75.97	-102.2	-123.6	-143.0	60.7	-119.41
4.50	34.30	2379.5	2366.9	2358.0	9.31	9.22	9.23	31.60	-17.8	-25.9	-56.8	2.21	2.38	-77.38	-101.8	-123.5	-143.1	86.7	-122.76
5.00	32.73	2396.1	2384.0	2375.6	9.26	9.32	9.42	31.85	-17.4	-26.2	-53.6	1.93	3.03	-76.78	-101.9	-123.6	-143.3	100.0	-123.63
5.50	31.75	2412.5	2400.4	2392.2	9.35	9.29	9.45	32.09	-16.6	-24.3	-51.7	1.69	2.53	-74.93	-102.2	-123.9	-143.4	148.1	-127.46
6.00	32.05	2429.0	2416.3	2408.1	9.54	9.38	9.46	32.24	-15.6	-25.4	-49.0	1.52	0.86	-73.44	-102.0	-123.7	-143.6	177.0	-128.49
6.50	32.21	2445.6	2432.3	2423.5	9.89	9.53	9.59	32.26	-16.3	-24.5	-46.4	1.58	1.68	-73.30	-100.3	-122.7	-142.7	211.6	-130.49
7.00	30.09	2461.0	2448.4	2439.3	10.17	9.86	9.79	32.44	-16.6	-25.4	-44.4	1.38	3.20	-75.40	-101.8	-123.3	-143.0	302.4	-133.36
7.50	29.12	2476.0	2463.4	2454.9	10.27	10.14	10.11	32.55	-16.2	-24.9	-42.6	1.21	3.52	-73.79	-101.3	-123.1	-143.0	361.5	-134.78
8.00	27.66	2490.3	2478.0	2469.4	10.22	10.26	10.32	32.68	-16.6	-24.0	-42.7	1.02	2.68	-73.83	-100.8	-121.8	-143.3	507.5	-137.58
8.50	26.89	2504.2	2491.8	2483.4	10.18	10.26	10.38	32.80	-16.6	-24.7	-42.5	0.79	1.18	-74.12	-100.1	-122.2	-142.8	606.7	-139.17
9.00	28.07	2518.9	2505.3	2496.7	10.35	10.25	10.37	32.84	-16.0	-23.3	-41.4	0.67	1.27	-72.20	-99.0	-121.0	-141.5	851.6	-141.88
10.00	24.96	2545.4	2532.4	2523.2	10.83	10.59	10.51	32.97	-15.6	-24.2	-40.9	0.29	3.94	-71.76	-97.9	-120.7	-141.1	1000.0	-143.35

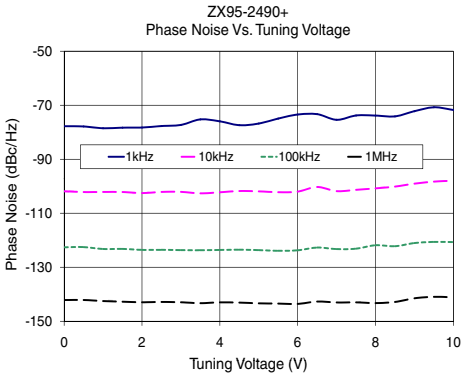
*at 25°C unless mentioned otherwise

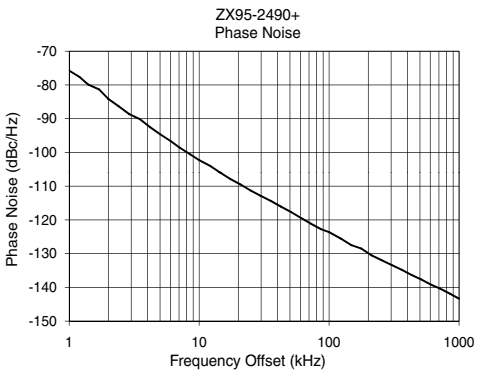












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