

Coaxial

Voltage Controlled Oscillator

ZX95-6640C+

Frequency Doubling 6520 to 6640 MHz

Features

- frequency based on multiplication of carrier frequency
- low phase noise
- low pushing
- low pulling
- protected by US patent 6,790,049



CASE STYLE: GB956

Applications

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

Connectors	Model
SMA	ZX95-6640C-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				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)			PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	F	2X(1/2F)		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Max.	F0.5			F1.5	F2	Vcc (volts)
ZX95-6640C+	6520	6640	+1	-72	-100	-121	-141	0.5	5	90-107	14	150	-90	-12	-12	-15	1.5	3	5	38

Maximum Ratings

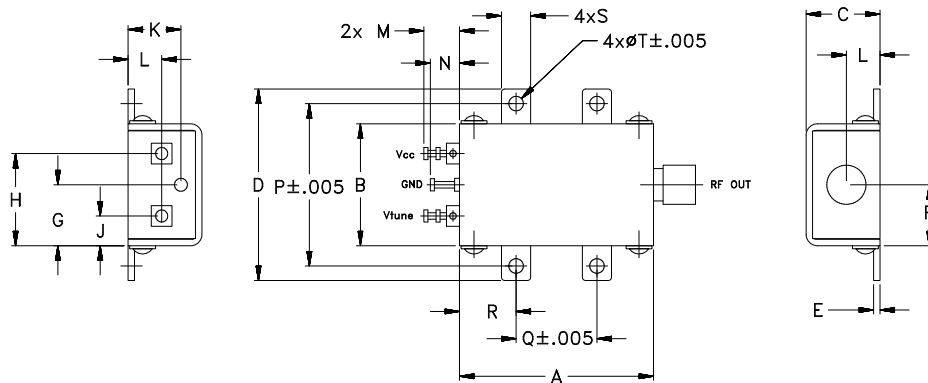
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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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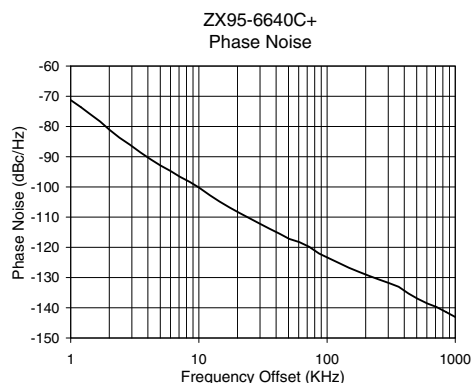
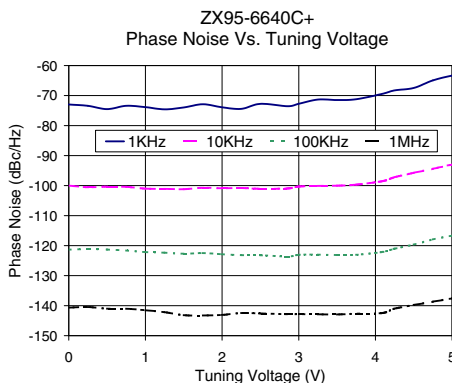
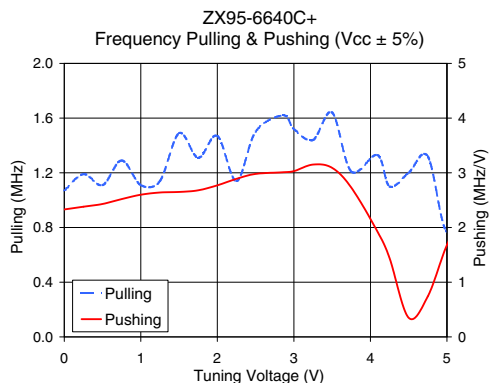
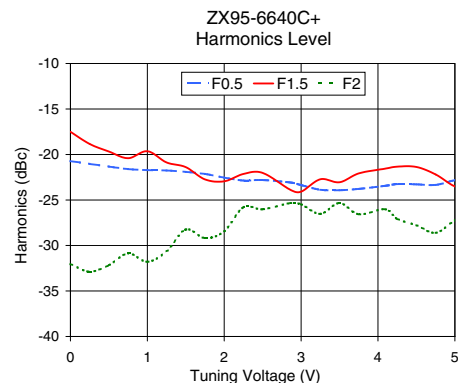
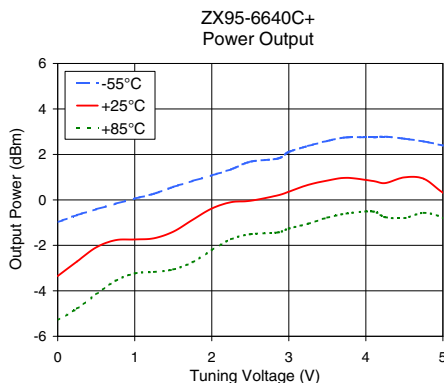
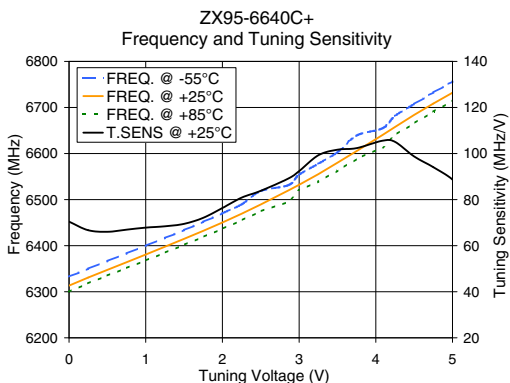
REV. A
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Performance Data & Curves*

ZX95-6640C+

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 6580 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F0.5	F1.5	F2			1kHz	10kHz	100kHz	1MHz		
0.00	70.42	6332.8	6313.2	6299.9	-0.98	-3.35	-5.29	25.10	-20.7	-17.5	-32.1	2.33	1.07	-73.0	-100.0	-121.3	-140.7	1.0	-71.26
0.25	66.72	6350.0	6330.8	6318.2	-0.67	-2.71	-4.78	25.22	-21.0	-18.8	-32.9	2.38	1.19	-73.4	-100.5	-121.2	-140.5	2.0	-81.05
0.50	66.03	6366.6	6347.5	6335.1	-0.41	-2.09	-4.15	25.33	-21.3	-19.7	-32.2	2.43	1.11	-74.5	-100.3	-121.3	-141.0	3.5	-88.59
0.75	66.95	6383.2	6364.0	6351.5	-0.17	-1.77	-3.56	25.43	-21.6	-20.4	-30.9	2.52	1.29	-73.4	-100.4	-121.6	-141.0	6.0	-94.71
1.00	67.84	6399.8	6380.8	6367.9	0.06	-1.74	-3.23	25.52	-21.7	-19.6	-31.8	2.60	1.11	-73.9	-101.0	-122.1	-141.5	8.5	-98.37
1.25	68.41	6416.6	6397.7	6384.6	0.27	-1.69	-3.17	25.62	-21.8	-20.9	-30.6	2.64	1.14	-74.6	-101.1	-122.4	-142.2	10.0	-100.19
1.50	69.46	6433.9	6414.8	6401.6	0.57	-1.40	-3.06	25.73	-21.9	-21.4	-28.3	2.65	1.49	-74.0	-101.2	-122.7	-143.2	20.8	-108.64
1.75	72.08	6451.8	6432.2	6418.9	0.83	-0.88	-2.74	25.85	-22.1	-22.7	-29.2	2.68	1.31	-72.9	-100.7	-122.5	-143.3	35.5	-113.82
2.00	76.37	6470.3	6450.2	6436.6	1.08	-0.38	-2.21	25.96	-22.5	-23.0	-28.4	2.77	1.47	-73.9	-100.9	-122.9	-143.1	60.7	-118.26
2.25	80.86	6489.7	6469.3	6455.0	1.34	-0.10	-1.73	26.06	-22.9	-22.1	-25.8	2.89	1.14	-74.4	-100.8	-123.2	-142.5	86.7	-122.05
2.50	83.83	6518.6	6489.5	6474.6	1.68	-0.04	-1.51	26.17	-22.8	-22.0	-26.0	2.98	1.50	-72.8	-101.1	-123.2	-142.6	100.0	-123.33
2.86	89.18	6531.4	6520.0	6495.3	1.82	0.20	-1.43	26.38	-23.1	-23.9	-25.3	3.01	1.62	-73.5	-100.9	-123.6	-142.9	148.1	-126.76
3.00	92.37	6554.0	6532.1	6520.3	2.11	0.36	-1.26	26.46	-23.4	-24.1	-25.5	3.03	1.52	-72.7	-100.3	-123.1	-142.8	177.0	-128.12
3.25	99.26	6577.8	6555.2	6539.1	2.37	0.66	-1.05	26.57	-23.9	-22.7	-26.5	3.15	1.44	-71.3	-100.1	-123.0	-142.9	211.6	-129.39
3.50	101.67	6602.8	6580.0	6562.9	2.59	0.85	-0.78	26.69	-23.9	-23.1	-25.3	3.09	1.64	-71.5	-100.0	-123.1	-142.9	302.4	-131.79
3.75	102.35	6639.2	6605.5	6588.2	2.75	0.97	-0.60	26.86	-23.8	-22.1	-26.6	2.73	1.21	-71.2	-99.7	-123.0	-142.7	361.5	-133.04
4.09	105.59	6655.0	6640.6	6613.7	2.75	0.83	-0.51	27.04	-23.5	-21.6	-26.0	1.93	1.33	-69.4	-98.5	-122.1	-142.5	507.5	-137.01
4.25	105.07	6681.6	6657.5	6640.4	2.78	0.74	-0.76	27.10	-23.3	-21.3	-27.1	1.44	1.10	-68.3	-97.2	-121.0	-141.0	606.7	-138.60
4.50	98.73	6707.6	6683.8	6665.5	2.69	0.99	-0.80	27.24	-23.3	-21.4	-27.8	0.35	1.20	-67.5	-95.7	-119.7	-139.8	851.6	-141.44
5.00	88.73	6756.0	6732.0	6714.2	2.39	0.32	-0.79	27.47	-22.8	-23.5	-27.2	1.68	0.77	-63.3	-93.0	-116.7	-137.6	1000.0	-143.06

*at 25°C unless mentioned otherwise



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