

Coaxial

Voltage Controlled Oscillator

ZX95-2660+

5V Tuning for PLL IC's 2620 to 2660 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
- AWY radio link



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2660-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					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dBr (MHz)	PUSHING (MHz/V)	DC OPERATING POWER Vcc Current (volts) (mA)	
								VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)								
	Min.	Max.	Typ.	1	10	100	1000	Min.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Typ.	Max.	
ZX95-2660+	2620	2660	+2.5	-83	-108	-129	-148	0.5	5	17-20	17	200	-90	-19	-10	0.4	0.3	5	45

Maximum Ratings

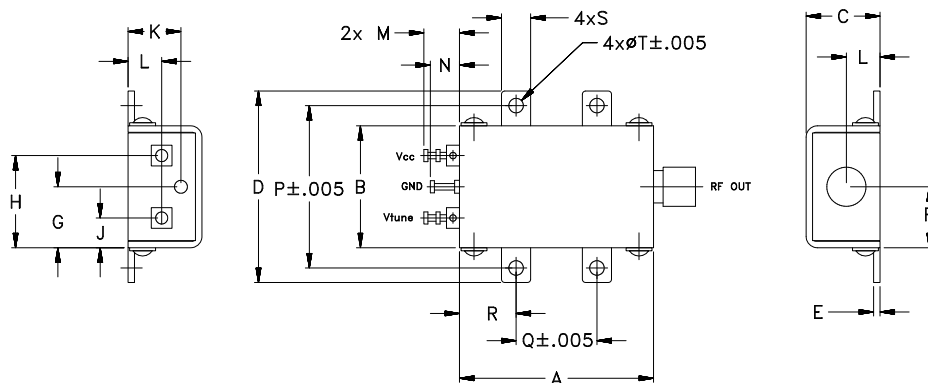
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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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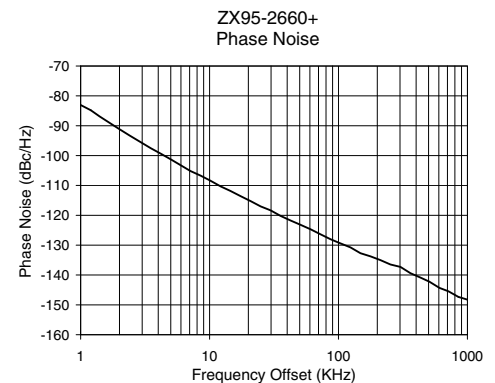
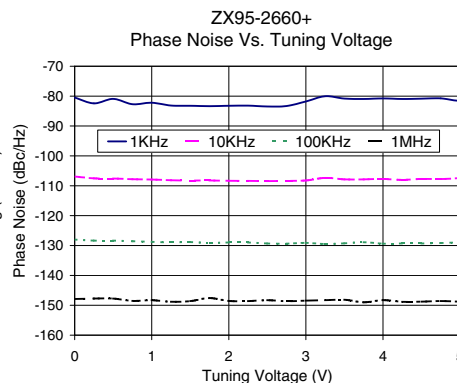
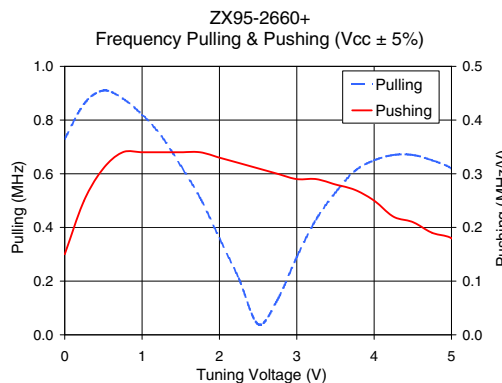
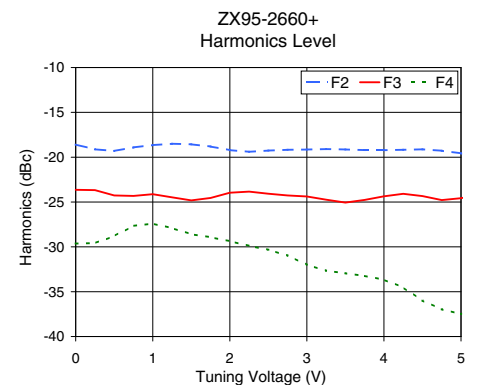
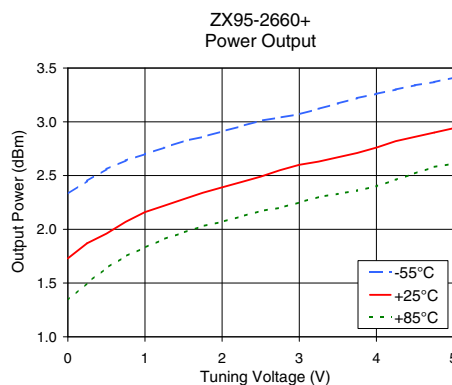
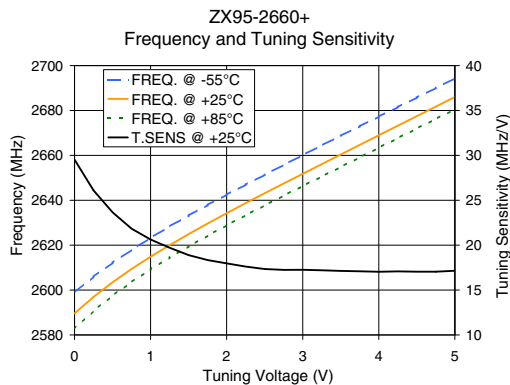
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Performance Data & Curves*

ZX95-2660+

V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			I _{cc} (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 2640 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	29.53	2598.9	2589.6	2582.8	2.33	1.73	1.34	36.98	-18.6	-23.6	-29.6	0.15	0.73	-80.5	-106.9	-128.0	-147.9	1.0	-83.05
0.50	23.65	2612.2	2603.5	2597.5	2.56	1.96	1.64	37.12	-19.3	-24.3	-28.8	0.31	0.91	-80.9	-107.6	-128.4	-147.7	2.0	-91.17
0.75	21.84	2617.9	2609.4	2603.6	2.64	2.07	1.75	37.19	-18.9	-24.3	-27.7	0.34	0.88	-82.7	-107.8	-128.6	-148.5	3.5	-97.53
1.00	20.63	2623.3	2614.9	2609.2	2.70	2.16	1.83	37.26	-18.7	-24.1	-27.4	0.34	0.82	-82.2	-107.9	-128.8	-148.3	6.0	-103.27
1.25	19.71	2628.3	2620.0	2614.5	2.76	2.22	1.91	37.33	-18.5	-24.5	-27.9	0.34	0.74	-83.1	-108.1	-128.9	-148.8	8.5	-106.70
1.50	18.89	2633.2	2624.9	2619.5	2.82	2.28	1.97	37.40	-18.6	-24.8	-28.6	0.34	0.63	-83.2	-108.3	-128.9	-148.6	10.0	-108.27
1.75	18.34	2637.9	2629.7	2624.2	2.86	2.34	2.03	37.46	-18.8	-24.6	-28.9	0.34	0.51	-83.4	-108.2	-129.1	-147.6	20.8	-115.23
2.00	17.97	2642.5	2634.2	2628.9	2.91	2.39	2.07	37.52	-19.2	-24.0	-29.4	0.33	0.36	-83.2	-108.3	-129.0	-148.6	35.5	-120.18
2.25	17.61	2647.0	2638.7	2633.4	2.96	2.44	2.12	37.58	-19.4	-23.8	-29.9	0.32	0.21	-83.2	-108.4	-129.0	-148.6	60.7	-124.68
2.50	17.34	2651.4	2643.1	2637.7	3.01	2.49	2.17	37.62	-19.3	-24.1	-30.3	0.31	0.04	-83.5	-108.4	-129.3	-148.3	86.7	-128.01
2.75	17.25	2655.8	2647.5	2642.1	3.04	2.55	2.20	37.67	-19.2	-24.3	-31.0	0.30	0.13	-83.3	-108.4	-129.4	-148.6	100.0	-129.14
3.00	17.25	2660.1	2651.8	2646.4	3.07	2.60	2.25	37.70	-19.2	-24.4	-32.0	0.29	0.29	-81.8	-108.2	-129.1	-148.5	148.1	-132.69
3.25	17.20	2664.4	2656.1	2650.6	3.12	2.63	2.30	37.73	-19.1	-24.7	-32.7	0.29	0.43	-80.0	-107.4	-129.5	-148.3	177.0	-133.74
3.50	17.14	2668.7	2660.4	2654.8	3.17	2.67	2.33	37.77	-19.1	-25.1	-32.9	0.28	0.53	-80.8	-107.9	-129.3	-148.1	211.6	-135.01
3.75	17.09	2673.0	2664.7	2659.1	3.22	2.71	2.36	37.81	-19.2	-24.8	-33.2	0.27	0.61	-81.0	-107.9	-128.9	-149.0	302.4	-137.30
4.00	17.04	2677.3	2669.0	2663.4	3.26	2.76	2.40	37.85	-19.2	-24.4	-33.7	0.25	0.65	-80.8	-107.7	-129.4	-148.3	361.5	-139.39
4.25	17.08	2681.5	2673.2	2667.7	3.30	2.82	2.46	37.90	-19.2	-24.1	-34.5	0.22	0.67	-80.9	-108.1	-129.3	-148.8	507.5	-142.24
4.50	17.05	2685.8	2677.5	2672.0	3.34	2.86	2.52	37.96	-19.1	-24.3	-36.0	0.21	0.67	-80.9	-107.7	-129.3	-148.8	606.7	-144.31
4.75	17.04	2690.0	2681.7	2676.2	3.37	2.90	2.58	38.01	-19.3	-24.8	-37.0	0.19	0.65	-80.7	-107.8	-129.2	-148.6	851.6	-147.34
5.00	17.15	2694.3	2686.0	2680.5	3.41	2.94	2.61	38.06	-19.6	-24.6	-37.5	0.18	0.62	-81.5	-107.4	-128.9	-148.8	1000.0	-148.25

*at 25°C unless mentioned otherwise



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