Coaxial

Voltage Controlled Oscillator

ZX95-4795+

5V Tuning for PLL IC's 4670 to 4850 MHz

Features

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

Applications

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

CASE STYLE: GB956

Connectors	Model
SMA	ZX95-4795-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.
ZX95-4795+	4670	4850	+0.2	-68	-93	-114	-135	0.5	4.5	80-96	7.5	280	-90	-30	-20	1.2	4.3	5	35

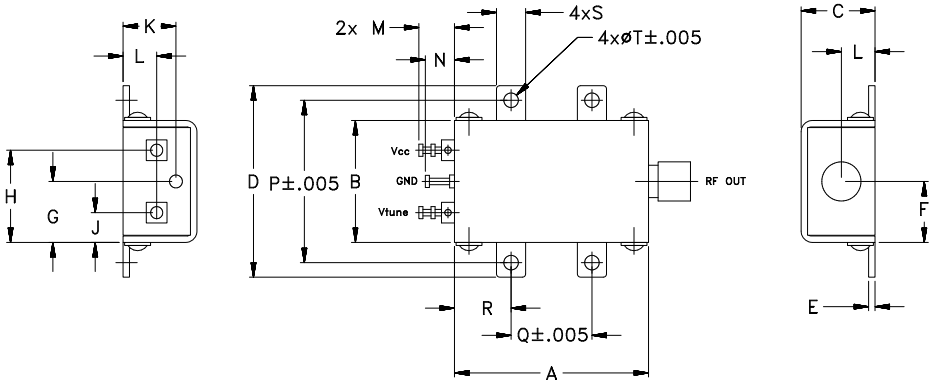
Maximum Ratings

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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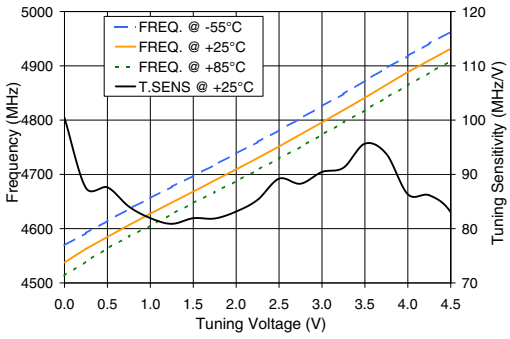
Performance Data & Curves*

ZX95-4795+

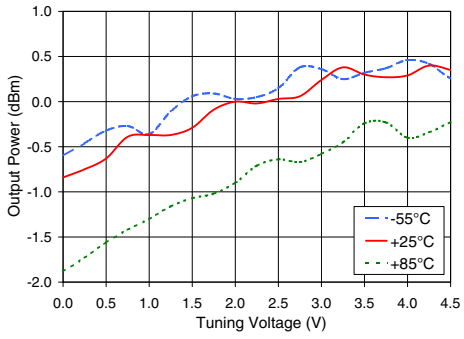
V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 4760 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	100.43	4569.3	4537.7	4513.6	-0.60	-0.84	-1.88	26.35	-35.1	-46.1	-53.4	3.69	1.62	-71.0	-94.5	-115.4	-135.7	1.0	-68.26
0.25	87.51	4591.9	4562.8	4539.4	-0.46	-0.75	-1.73	26.39	-34.7	-49.5	-52.0	3.55	0.31	-71.2	-94.3	-115.3	-135.1	2.0	-77.19
0.50	87.63	4614.3	4584.7	4563.8	-0.32	-0.63	-1.56	26.42	-33.5	-49.6	-51.1	3.59	1.33	-72.8	-94.6	-115.2	-135.4	3.5	-83.63
0.75	84.08	4636.0	4606.6	4585.5	-0.27	-0.39	-1.42	26.43	-32.9	-51.0	-53.5	3.70	1.84	-72.3	-94.6	-115.7	-135.5	6.0	-89.29
1.00	81.94	4656.4	4627.6	4605.5	-0.36	-0.37	-1.30	26.44	-34.7	-55.0	-52.9	3.96	1.40	-71.0	-94.0	-115.0	-134.8	8.5	-91.59
1.25	80.89	4677.0	4648.1	4626.8	-0.11	-0.37	-1.16	26.47	-32.7	-56.2	-54.9	3.59	0.27	-71.7	-94.6	-115.8	-135.8	10.0	-93.00
1.50	81.92	4697.3	4668.3	4647.2	0.06	-0.29	-1.07	26.47	-34.1	-58.1	-59.0	4.17	0.93	-66.7	-93.3	-114.8	-135.0	20.8	-100.84
1.75	81.87	4717.5	4688.8	4667.5	0.09	-0.09	-1.02	26.50	-32.4	-69.4	-54.3	4.00	1.81	-70.9	-95.0	-115.0	-135.1	35.5	-105.87
2.00	83.16	4738.4	4709.3	4687.5	0.03	0.00	-0.90	26.52	-32.5	-55.4	-54.4	3.85	1.70	-69.8	-94.6	-115.4	-135.8	60.7	-110.09
2.25	85.31	4759.6	4730.1	4708.4	0.05	-0.02	-0.71	26.52	-33.3	-52.1	-64.6	4.24	0.64	-68.3	-94.6	-114.9	-135.0	85.2	-113.60
2.50	89.22	4781.3	4751.4	4729.2	0.15	0.03	-0.64	26.53	-33.3	-51.0	-59.4	4.33	0.71	-69.3	-93.0	-114.5	-134.9	100.0	-114.99
2.75	88.27	4803.2	4773.7	4750.9	0.38	0.06	-0.67	26.55	-32.3	-52.0	-66.3	4.01	1.62	-69.6	-93.6	-115.4	-135.7	142.9	-118.11
3.00	90.45	4825.8	4795.8	4773.1	0.36	0.24	-0.58	26.56	-32.1	-50.6	-69.9	4.45	1.61	-69.2	-92.0	-114.7	-134.6	200.6	-121.05
3.25	91.22	4848.3	4818.4	4795.4	0.25	0.38	-0.45	26.57	-31.8	-51.6	-69.3	4.13	0.53	-67.5	-94.2	-115.0	-134.9	281.6	-123.86
3.50	95.66	4872.6	4841.2	4818.4	0.32	0.30	-0.24	26.57	-30.1	-54.7	-66.5	3.73	0.71	-68.8	-94.0	-115.3	-135.4	330.7	-125.26
3.75	93.76	4896.0	4865.1	4841.6	0.37	0.27	-0.23	26.56	-30.9	-52.2	-56.7	3.48	1.35	-66.9	-92.8	-115.1	-134.6	464.2	-128.42
4.00	86.35	4918.2	4888.5	4864.2	0.46	0.29	-0.40	26.58	-32.2	-54.6	-65.7	3.20	1.18	-68.4	-93.3	-114.1	-134.4	554.9	-129.96
4.25	86.15	4941.1	4910.1	4887.3	0.42	0.40	-0.34	26.58	-30.5	-56.5	-52.1	2.18	0.38	-68.0	-94.5	-115.0	-135.0	914.6	-134.24
4.50	83.02	4963.0	4931.7	4909.1	0.26	0.35	-0.23	26.55	-32.4	-57.3	-43.0	1.65	0.46	-67.0	-93.3	-114.1	-134.2	1000.0	-134.97

*at 25°C unless mentioned otherwise

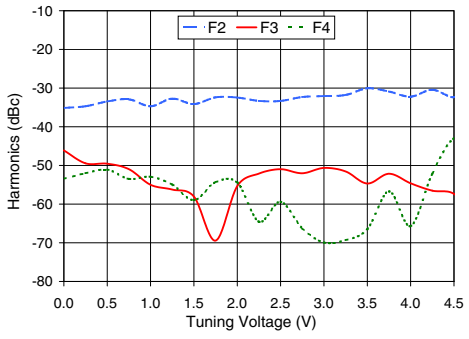
ZX95-4795+
Frequency and Tuning Sensitivity



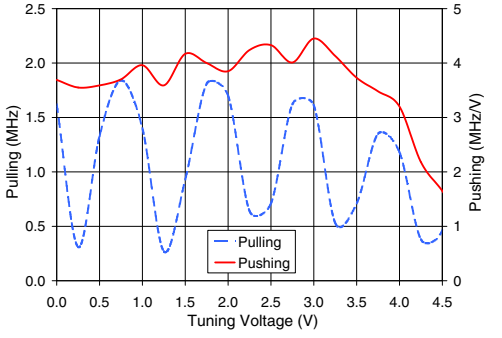
ZX95-4795+
Power Output



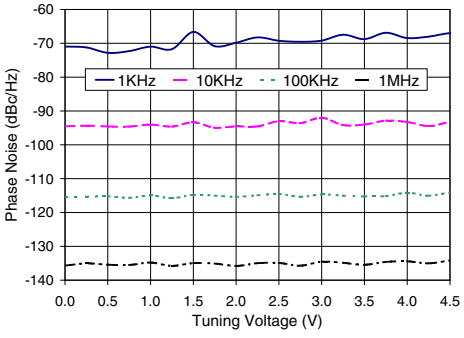
ZX95-4795+
Harmonics Level



ZX95-4795+
Frequency Pulling & Pushing (Vcc ± 5%)



ZX95-4795+
Phase Noise Vs. Tuning Voltage



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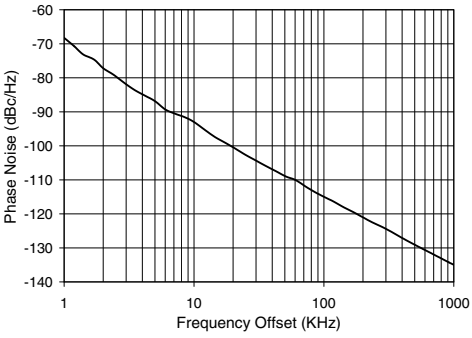
Phase Noise



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