

Coaxial

Voltage Controlled Oscillator

ZX95-4300+

5V Tuning for PLL IC's 4150 to 4300 MHz

Features

- low phase noise
- low pushing
- protected by US patent 6,790,049



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communications
- radio altimetry

Connectors	Model
SMA	ZX95-4300-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	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-4300+	4150	4300	+4.5	-62	-90	-112	-132	0.5	5	58-97	16	330	-90	-26	-18	6	2.5	5	35

Maximum Ratings

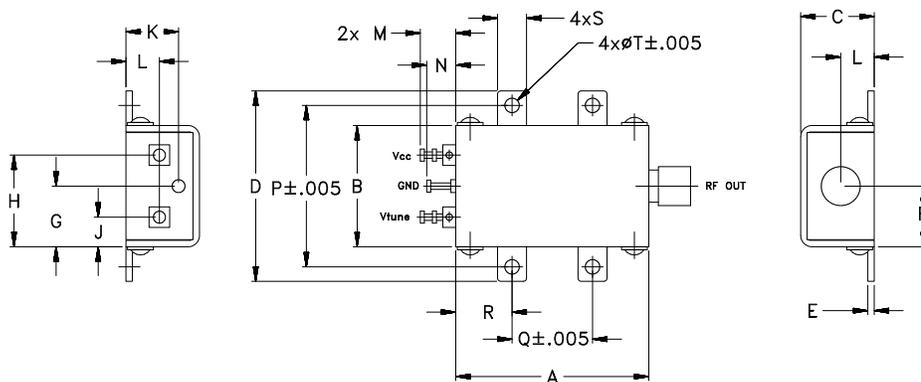
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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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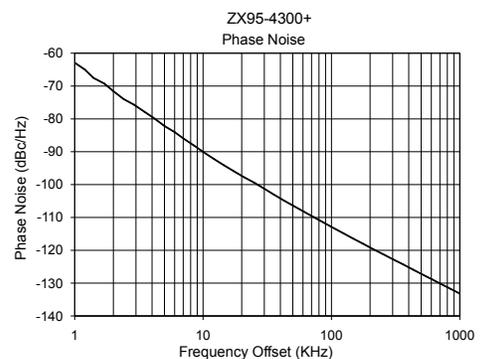
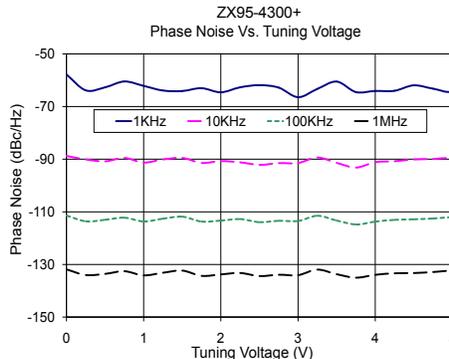
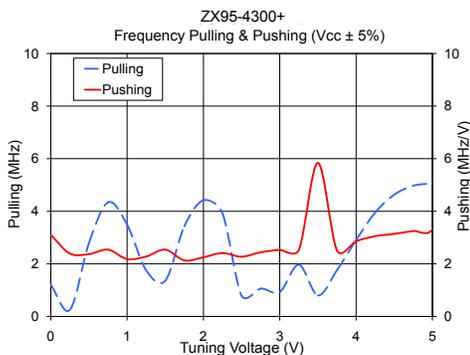
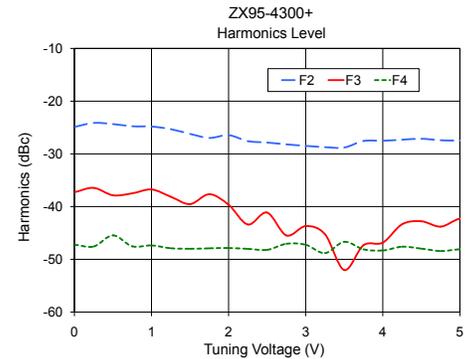
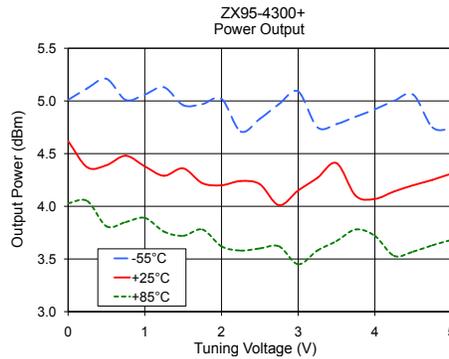
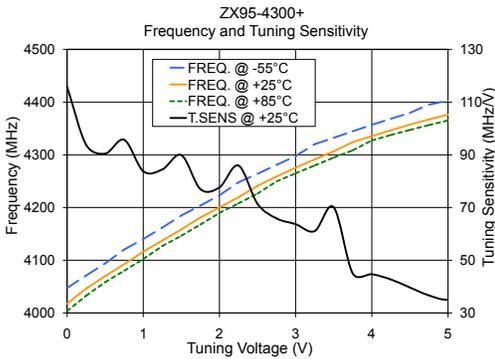
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Performance Data & Curves*

ZX95-4300+

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 4225 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	115.82	4047.3	4017.4	4003.5	5.01	4.62	4.03	29.10	-24.9	-37.3	-47.2	3.10	1.20	-57.81	-88.8	-111.4	-131.9	1.0	-62.90
0.50	90.41	4094.1	4069.8	4058.4	5.21	4.39	3.81	29.07	-24.3	-37.9	-45.5	2.37	2.79	-62.69	-90.8	-113.0	-133.6	2.0	-71.55
0.75	95.68	4120.3	4092.4	4080.1	5.01	4.48	3.85	29.03	-24.8	-37.5	-47.5	2.54	4.34	-60.47	-89.5	-112.2	-132.6	3.5	-77.85
1.00	83.74	4140.1	4116.3	4102.4	5.06	4.38	3.89	29.02	-24.8	-36.8	-47.4	2.18	3.49	-62.15	-91.3	-113.7	-134.1	6.0	-84.02
1.25	84.42	4161.9	4137.2	4126.9	5.13	4.29	3.76	29.00	-25.3	-38.1	-47.9	2.28	1.75	-63.91	-90.1	-112.6	-133.2	8.5	-88.11
1.50	89.86	4185.0	4158.4	4146.4	4.96	4.36	3.72	28.98	-26.2	-39.5	-48.0	2.54	1.36	-64.10	-89.5	-111.8	-132.3	10.0	-90.04
1.75	76.98	4203.6	4180.8	4167.6	4.97	4.22	3.78	28.98	-27.0	-37.7	-47.9	2.13	3.43	-63.01	-91.4	-113.7	-134.3	20.8	-97.74
2.00	77.63	4223.3	4200.1	4189.8	5.02	4.20	3.62	28.96	-26.5	-39.7	-47.9	2.25	4.42	-64.58	-90.7	-113.3	-133.8	35.5	-103.00
2.25	85.93	4247.6	4219.5	4207.8	4.71	4.24	3.58	28.94	-27.6	-43.4	-48.0	2.41	3.92	-62.69	-91.2	-112.8	-133.2	60.7	-108.20
2.50	71.38	4264.1	4241.0	4226.4	4.83	4.21	3.60	28.93	-27.9	-41.1	-48.2	2.27	0.79	-61.87	-92.2	-113.9	-134.4	86.7	-111.54
2.75	65.85	4280.8	4258.8	4249.5	4.97	4.01	3.62	28.95	-28.2	-45.5	-47.1	2.44	1.06	-62.81	-91.5	-113.4	-133.9	100.0	-112.89
3.00	63.68	4297.4	4275.3	4264.8	5.09	4.15	3.45	28.94	-28.5	-43.7	-47.3	2.53	0.93	-66.43	-91.5	-113.5	-134.1	123.9	-114.82
3.25	61.05	4320.0	4291.2	4279.8	4.75	4.27	3.58	28.93	-28.7	-45.2	-48.8	2.53	1.97	-63.30	-89.4	-111.5	-132.0	177.0	-118.04
3.50	70.10	4332.0	4306.4	4294.6	4.78	4.41	3.67	28.91	-28.8	-52.0	-46.7	5.84	0.80	-60.50	-91.4	-113.3	-133.7	211.6	-119.67
3.75	44.97	4344.5	4324.0	4308.5	4.85	4.10	3.78	28.94	-27.6	-47.3	-48.1	2.51	1.76	-64.49	-93.2	-114.8	-135.0	302.4	-122.77
4.00	44.68	4356.8	4335.2	4327.2	4.92	4.07	3.72	28.94	-27.5	-46.8	-48.3	2.86	2.90	-64.07	-91.2	-113.7	-133.9	361.5	-124.28
4.25	42.72	4368.3	4346.4	4337.6	5.00	4.14	3.53	28.93	-27.3	-43.4	-47.6	3.05	3.95	-64.00	-90.8	-113.1	-133.4	507.5	-127.29
4.50	39.66	4379.5	4357.1	4347.0	5.06	4.20	3.57	28.92	-27.1	-42.8	-48.0	3.14	4.63	-61.93	-90.1	-112.9	-133.3	606.7	-128.84
4.75	36.65	4395.0	4367.0	4356.4	4.75	4.25	3.63	28.90	-27.4	-43.8	-48.4	3.25	4.97	-63.21	-89.9	-112.5	-132.9	712.4	-130.24
5.00	35.05	4402.6	4376.1	4365.0	4.74	4.31	3.68	28.89	-27.5	-42.3	-48.1	3.32	5.07	-64.27	-89.5	-112.1	-132.4	1000.0	-133.19

*at 25°C unless mentioned otherwise



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