Coaxial

Voltage Controlled Oscillator

ZX95-625A+

Wide Band 350 to 700 MHz

CASE STYLE: GB956

Connectors	Model
SMA	ZX95-625A-S+

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- broadcast equipment

+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.
ZX95-625A+	350	700	+6.2	-78	-102	-123	-143	0.3	18	15-30	170	20	-90	-15	-	1	0.2	10	30

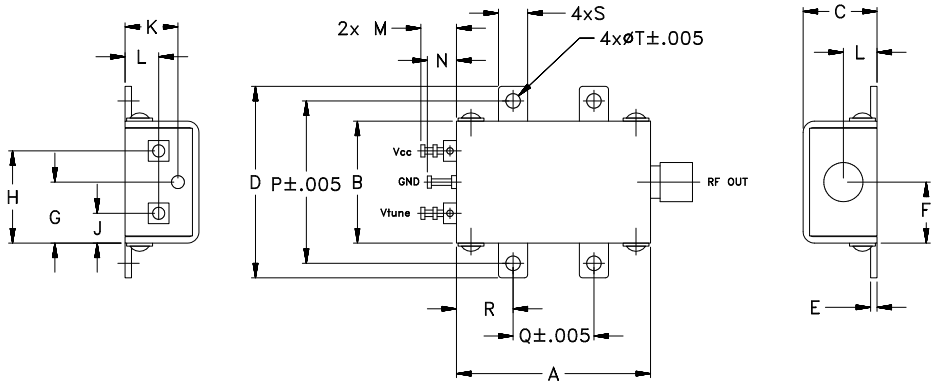
Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	12V
Absolute Max. Tuning Voltage (Vtune)	20V
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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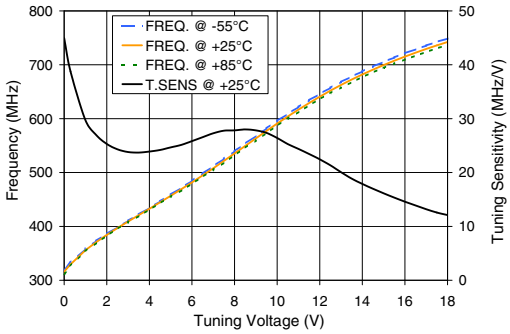
Performance Data & Curves*

ZX95-625A+

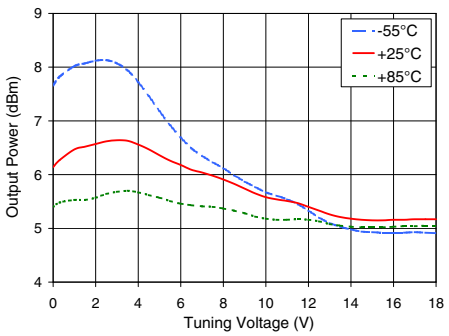
V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (KHz)	PHASE NOISE at 488 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	44.97	320.1	316.1	311.9	7.66	6.14	5.40	22.31	-25.3	-13.0	-20.2	0.09	1.10	-72.5	-93.7	-116.4	-137.2	1.0	-75.58
0.30	38.77	333.0	329.5	326.5	7.82	6.27	5.48	22.39	-21.9	-13.2	-20.7	0.15	1.21	-72.8	-94.6	-117.3	-137.8	2.0	-85.02
1.00	29.72	358.6	355.9	354.1	8.02	6.47	5.53	22.55	-16.6	-13.7	-23.1	0.22	1.06	-73.4	-95.6	-118.8	-139.0	3.5	-91.18
2.00	25.31	386.3	384.2	382.8	8.12	6.57	5.57	22.71	-14.3	-14.9	-31.3	0.23	0.61	-72.1	-98.3	-120.5	-140.3	6.0	-96.86
3.00	23.81	410.4	409.0	407.6	8.07	6.64	5.68	22.82	-13.2	-16.4	-30.0	0.19	0.44	-74.1	-99.1	-121.2	-141.1	8.5	-100.51
4.00	23.90	434.3	432.8	431.1	7.72	6.56	5.67	22.92	-12.7	-18.7	-23.3	0.11	0.84	-74.6	-97.1	-121.8	-142.2	10.0	-102.87
5.00	24.66	459.1	456.8	454.8	7.18	6.36	5.57	23.01	-12.7	-22.0	-21.0	0.03	1.02	-76.3	-100.9	-123.3	-143.0	20.8	-110.24
6.00	25.83	484.8	481.7	479.3	6.69	6.18	5.46	23.09	-12.2	-26.1	-21.1	0.06	1.03	-76.2	-102.3	-124.2	-144.1	35.5	-115.13
6.50	26.56	498.1	494.6	491.9	6.49	6.09	5.43	23.14	-12.4	-27.1	-22.2	0.09	0.97	-77.2	-101.4	-124.7	-144.7	60.7	-119.56
7.00	27.29	511.7	507.9	505.0	6.35	6.04	5.41	23.18	-12.7	-25.6	-23.5	0.12	0.86	-80.2	-103.4	-125.0	-144.8	86.7	-123.10
8.00	27.83	539.7	535.4	532.1	6.12	5.91	5.37	23.27	-13.3	-21.8	-27.1	0.15	0.55	-81.0	-104.5	-125.5	-145.7	100.0	-124.31
9.00	27.83	568.0	563.3	559.7	5.87	5.74	5.28	23.35	-14.2	-19.0	-29.2	0.20	0.40	-81.4	-105.3	-125.6	-146.3	148.1	-127.85
10.00	26.42	595.8	590.9	587.0	5.67	5.58	5.18	23.41	-15.7	-16.9	-27.6	0.26	0.84	-83.8	-106.4	-126.1	-146.4	177.0	-129.35
11.00	24.40	621.8	616.8	612.7	5.54	5.51	5.16	23.47	-17.6	-16.0	-25.7	0.30	1.27	-83.6	-106.0	-125.9	-146.8	211.6	-130.96
12.00	22.44	646.0	640.7	636.3	5.33	5.40	5.16	23.48	-19.8	-15.7	-24.5	0.32	1.29	-80.7	-105.4	-125.9	-146.9	302.4	-134.19
13.00	20.06	668.1	662.6	657.9	5.10	5.26	5.08	23.50	-22.1	-16.3	-23.7	0.31	0.87	-81.1	-105.9	-126.0	-146.6	361.5	-135.66
14.00	17.90	687.8	682.1	677.1	4.98	5.18	5.03	23.52	-24.2	-17.1	-23.4	0.28	0.75	-83.0	-106.0	-126.0	-146.9	507.5	-138.57
15.00	16.14	705.5	699.5	694.3	4.93	5.15	5.02	23.53	-26.0	-18.3	-23.2	0.23	0.99	-82.7	-104.4	-125.5	-146.0	606.7	-140.07
16.00	14.59	721.4	715.2	709.8	4.92	5.16	5.03	23.53	-26.7	-19.7	-23.3	0.18	1.38	-80.4	-105.0	-125.2	-146.2	851.6	-143.03
18.00	12.10	748.8	742.4	736.6	4.91	5.17	5.05	23.54	-25.1	-22.8	-23.6	0.11	1.77	-80.3	-104.9	-125.4	-146.2	1000.0	-144.07

*at 25°C unless mentioned otherwise

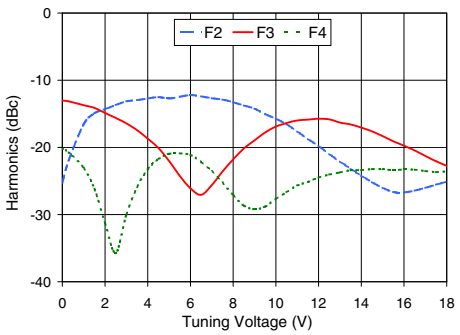
ZX95-625A+
Frequency and Tuning Sensitivity



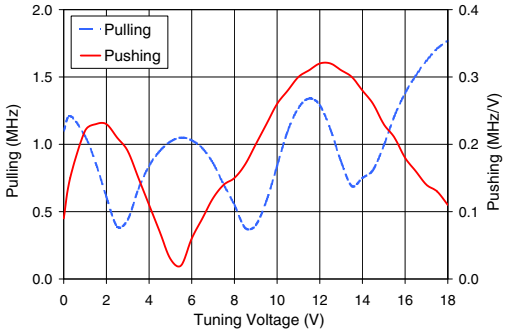
ZX95-625A+
Power Output



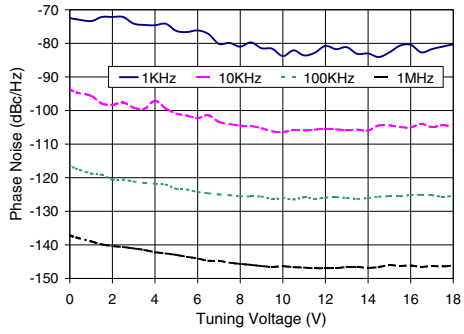
ZX95-625A+
Harmonics Level



ZX95-625A+
Frequency Pulling & Pushing (Vcc ± 5%)



ZX95-625A+
Phase Noise Vs. Tuning Voltage



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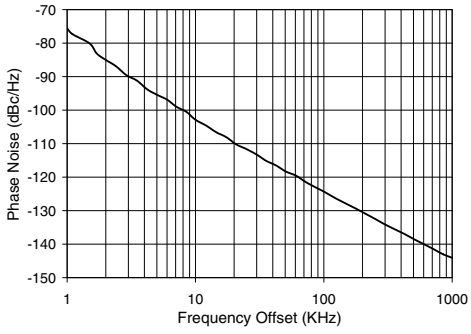
Phase Noise



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