

Coaxial

Voltage Controlled Oscillator

ZX95-625-S+

Wide Band 280 to 625 MHz

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



Generic photo used for illustration purposes only
CASE STYLE: GB956

Connectors	Model
SMA	ZX95-625-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 Br (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.	Typ.	Vcc (volts)	Current (mA)
ZX95-625-S+	280	625	+6.4	-78	-104	-125	-146	0.3	18	14-30	185	25	-90	-24	-	1	0.8	10	30			

Maximum Ratings

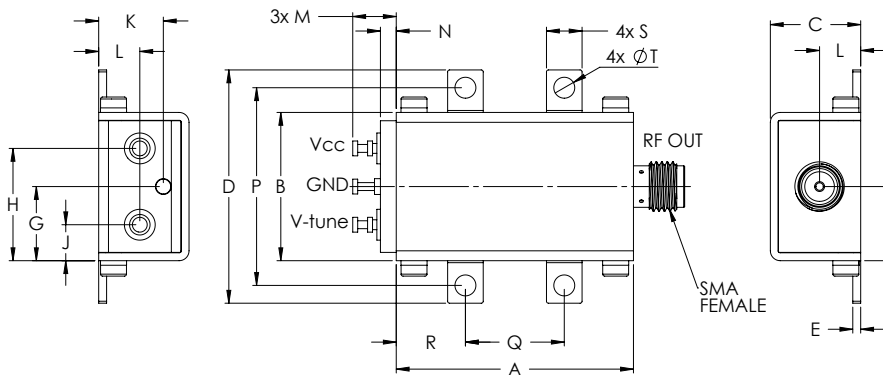
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	12V
Absolute Max. Tuning Voltage (Vtune)	20V
All specifications	50 ohm system

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	.08	1.00	.50	.35	.18	.106	grams
30.48	19.15	11.61	30.07	1.02	9.53	9.53	14.43	4.62	8.31	5.28	5.59	2.03	25.40	12.70	8.89	4.57	2.69	35.0

Notes

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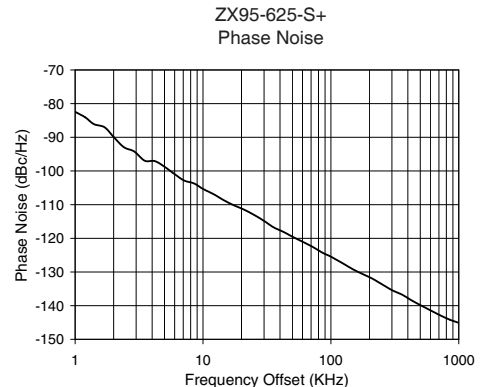
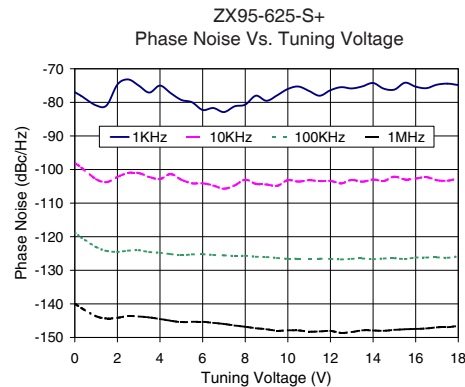
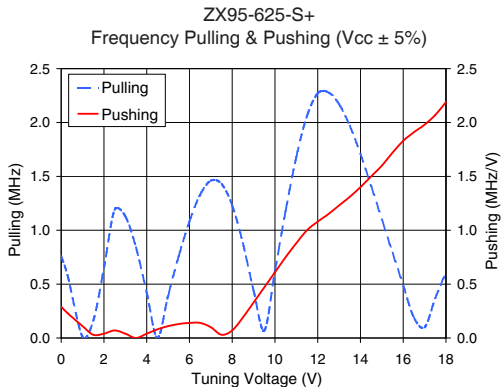
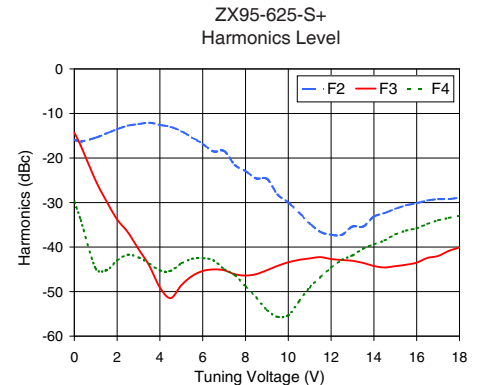
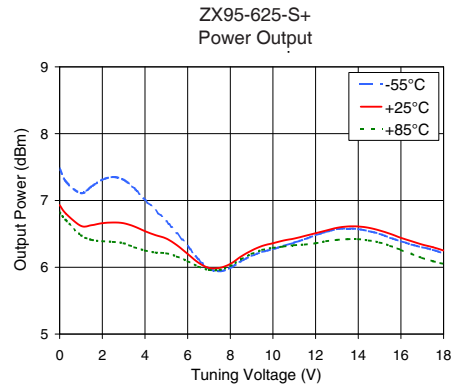
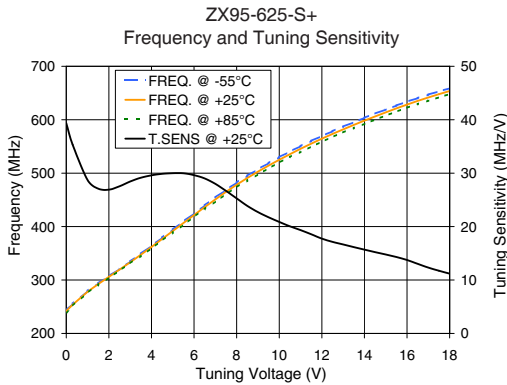


Performance Data & Curves*

ZX95-625-S+

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 453 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	39.37	243.8	242.0	239.3	7.48	6.93	6.82	17.27	-15.9	-14.3	-29.7	0.29	0.76	-77.0	-98.0	-118.8	-139.9	1.0	-82.44
0.30	35.34	255.5	253.8	251.6	7.28	6.80	6.70	17.39	-16.3	-17.2	-34.0	0.23	0.58	-78.1	-99.4	-120.2	-141.2	2.0	-89.91
1.00	28.73	279.6	278.0	276.3	7.11	6.62	6.48	17.66	-15.4	-25.1	-44.9	0.11	0.01	-80.9	-102.9	-123.1	-143.7	3.5	-96.96
2.00	26.90	307.2	305.9	304.2	7.31	6.66	6.39	18.03	-13.5	-33.8	-43.0	0.04	0.65	-74.7	-102.2	-124.5	-144.1	6.0	-100.94
3.00	28.43	334.7	333.1	331.2	7.31	6.66	6.36	18.37	-12.4	-40.5	-42.3	0.04	1.13	-75.0	-101.1	-124.0	-143.8	8.5	-103.70
4.00	29.59	364.1	361.9	359.4	7.01	6.54	6.25	18.70	-12.6	-49.1	-45.3	0.04	0.42	-75.0	-102.8	-124.8	-144.5	10.0	-105.33
5.00	30.00	394.5	391.6	388.6	6.69	6.43	6.21	18.96	-14.0	-48.6	-43.7	0.11	0.39	-79.3	-103.0	-125.6	-145.5	20.8	-111.42
6.00	29.63	424.8	421.6	418.2	6.32	6.20	6.09	19.16	-16.9	-45.4	-42.5	0.14	1.08	-82.3	-104.1	-125.2	-145.3	35.5	-116.70
7.00	28.00	454.5	451.0	447.0	5.98	5.99	5.96	19.36	-18.5	-45.2	-44.9	0.10	1.46	-82.9	-105.7	-125.6	-146.0	60.7	-121.11
8.00	25.28	482.4	478.3	473.8	5.99	6.05	6.02	19.57	-22.9	-46.4	-48.8	0.07	1.23	-80.7	-103.1	-125.7	-146.8	86.7	-124.34
9.00	22.71	507.3	502.9	497.9	6.17	6.25	6.20	19.75	-24.7	-45.2	-54.1	0.33	0.44	-79.5	-104.5	-126.1	-147.6	100.0	-125.46
10.00	20.87	529.9	525.1	519.8	6.27	6.36	6.29	19.84	-30.0	-43.4	-55.3	0.61	0.62	-76.0	-103.2	-126.5	-147.9	148.1	-129.18
11.00	19.35	550.6	545.6	540.0	6.37	6.43	6.33	19.89	-34.7	-42.5	-49.1	0.88	1.68	-76.6	-103.2	-126.5	-148.3	177.0	-130.61
12.00	17.74	569.6	564.5	558.8	6.48	6.51	6.36	19.93	-37.2	-42.7	-44.6	1.08	2.27	-76.4	-103.4	-126.6	-148.1	211.6	-131.99
13.00	16.66	587.1	582.0	576.2	6.57	6.59	6.41	19.90	-35.4	-43.1	-41.9	1.23	2.17	-75.9	-103.1	-126.6	-148.4	302.4	-135.45
14.00	15.68	603.6	598.4	592.5	6.57	6.61	6.42	19.83	-33.2	-44.2	-39.4	1.40	1.71	-74.2	-103.0	-126.7	-147.9	361.5	-136.75
15.00	14.77	619.2	613.8	607.8	6.50	6.55	6.37	19.75	-31.4	-44.3	-37.2	1.60	1.10	-76.2	-102.1	-126.4	-147.7	507.5	-139.96
16.00	13.75	633.8	628.4	622.3	6.39	6.44	6.26	19.68	-30.2	-43.5	-35.8	1.83	0.49	-75.3	-102.7	-126.2	-147.5	606.7	-141.49
17.00	12.32	647.0	641.8	635.8	6.30	6.34	6.14	19.61	-29.3	-42.0	-34.0	1.98	0.10	-74.7	-103.2	-126.2	-147.0	851.6	-144.17
18.00	11.19	658.9	653.8	648.0	6.21	6.25	6.05	19.52	-28.9	-40.1	-33.0	2.19	0.61	-74.9	-102.6	-125.9	-146.5	1000.0	-145.10

*at 25°C unless mentioned otherwise



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