

Coaxial

Voltage Controlled Oscillator

ZX95-1015-S+

Linear Tuning 750 to 1010 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- mobile TV



Generic photo used for illustration purposes only
CASE STYLE: GB956

Connectors	Model
SMA	ZX95-1015-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.				VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Typ.		Typ.	Typ.			Typ.	Vcc (volts)	Current (mA)
				1	10	100	1000	Min.	Max.	Typ.	Typ.	Typ.		Typ.	Typ.			Max.	Typ.	Max.
ZX95-1015-S+	750	1010	+6	-85	-113	-134	-154	0.5	28	7-15	70	35	-90	-20	-10	1	1.5	5	35	

Maximum Ratings

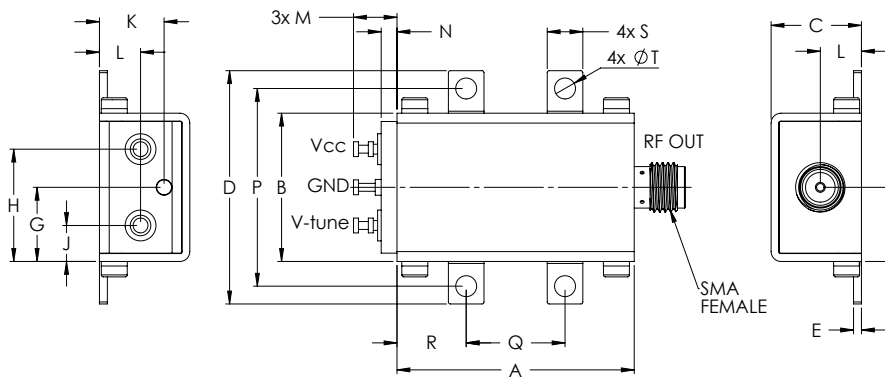
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	30V
All specifications	50 ohm system

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	19.05	11.68	29.97	1.02	9.65	9.65	14.48	4.57	8.38	5.33	5.59	2.03	25.40	12.70	8.89	4.57	2.69	35.0

Notes

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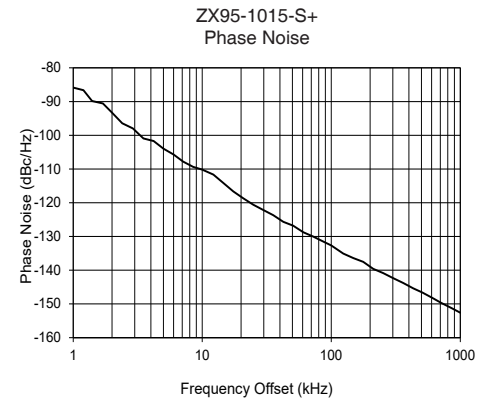
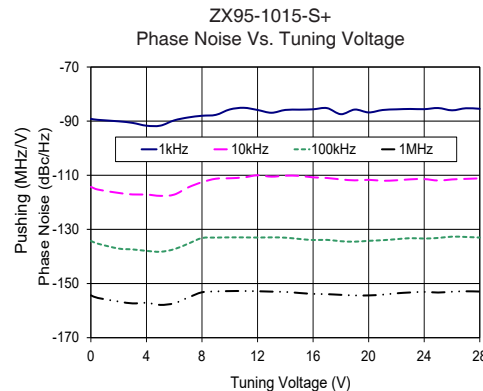
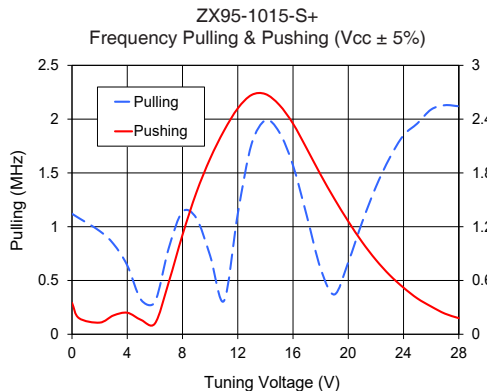
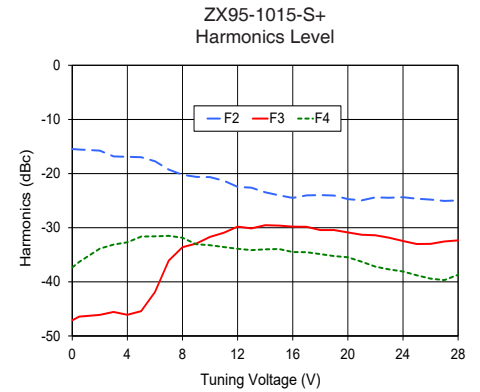
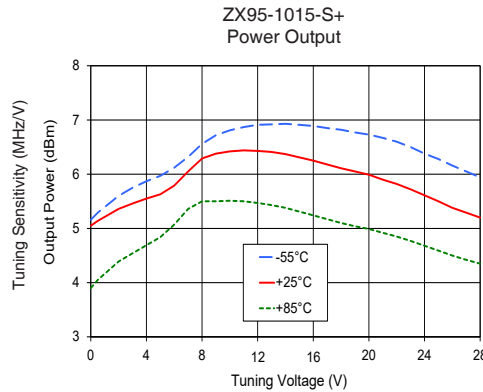
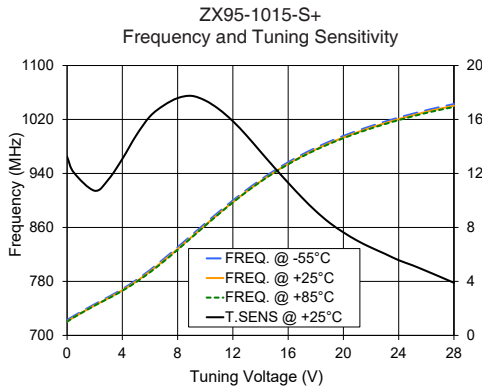


Performance Data & Curves*

ZX95-1015-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 880 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	13.25	722.5	720.4	720.1	5.16	5.05	3.90	19.93	-15.5	-47.1	-37.4	0.35	1.12	-89.18	-114.3	-134.3	-154.4	1.0	-85.85
0.50	12.05	729.0	727.1	726.8	5.29	5.14	4.05	20.05	-15.6	-46.4	-36.3	0.18	1.08	-89.53	-115.3	-135.3	-155.3	2.0	-93.31
2.00	10.72	746.2	744.5	744.1	5.60	5.36	4.39	20.30	-15.8	-46.1	-33.9	0.13	0.96	-90.08	-116.5	-137.1	-156.7	3.5	-100.92
4.00	13.08	768.6	766.8	766.0	5.87	5.55	4.69	20.57	-16.9	-46.1	-32.7	0.24	0.64	-91.70	-117.1	-137.9	-157.1	6.0	-105.70
6.00	16.23	796.8	794.7	793.5	6.12	5.79	5.07	20.89	-17.7	-41.9	-31.6	0.12	0.30	-89.72	-117.1	-137.3	-157.3	8.5	-109.37
8.00	17.58	830.6	828.0	826.8	6.56	6.29	5.50	21.03	-20.2	-33.6	-31.9	1.11	1.14	-88.02	-112.6	-133.2	-153.2	10.0	-110.18
10.00	17.41	865.9	863.3	862.6	6.81	6.42	5.51	20.71	-20.7	-31.7	-33.2	1.96	0.73	-85.68	-111.1	-133.0	-152.8	20.8	-118.68
11.00	16.76	883.2	880.7	880.2	6.87	6.44	5.50	20.63	-21.3	-30.9	-33.6	2.27	0.31	-85.07	-110.8	-133.0	-152.8	35.5	-123.68
12.00	15.87	899.9	897.5	897.0	6.91	6.43	5.47	20.57	-22.5	-29.8	-33.9	2.52	1.12	-85.88	-110.0	-133.0	-152.9	60.7	-128.75
13.00	14.80	915.7	913.4	912.9	6.92	6.41	5.43	20.54	-22.6	-30.1	-34.1	2.67	1.77	-86.91	-110.5	-133.0	-153.0	86.7	-131.51
14.00	13.62	930.5	928.2	927.7	6.93	6.37	5.38	20.54	-23.5	-29.5	-34.0	2.68	1.99	-85.86	-110.2	-133.1	-153.1	100.0	-132.65
15.00	12.44	944.1	941.8	941.2	6.91	6.31	5.31	20.55	-24.0	-29.6	-33.9	2.56	1.88	-85.76	-110.2	-133.5	-153.5	148.1	-136.40
16.00	11.31	956.5	954.2	953.6	6.89	6.25	5.24	20.57	-24.5	-29.8	-34.5	2.35	1.57	-85.62	-110.8	-133.9	-153.8	177.0	-137.52
17.00	10.22	967.8	965.5	964.7	6.85	6.18	5.17	20.61	-24.0	-29.8	-34.5	2.07	1.10	-85.19	-111.0	-133.9	-153.9	211.6	-139.60
18.00	9.21	978.0	975.8	974.8	6.82	6.11	5.10	20.67	-24.0	-30.4	-34.9	1.78	0.61	-87.44	-111.5	-134.4	-154.2	302.4	-142.36
20.00	7.64	995.6	993.3	992.2	6.73	5.99	4.99	20.77	-24.7	-30.9	-35.5	1.26	0.67	-86.79	-111.7	-134.2	-154.4	361.5	-143.79
22.00	6.51	1010.2	1008.0	1006.7	6.60	5.82	4.85	20.84	-24.4	-31.4	-37.2	0.83	1.37	-85.64	-111.9	-133.6	-153.6	507.5	-146.61
24.00	5.57	1022.8	1020.5	1019.1	6.38	5.61	4.68	20.93	-24.4	-32.5	-38.1	0.52	1.85	-85.58	-111.4	-133.4	-153.1	606.7	-148.21
26.00	4.77	1033.6	1031.3	1029.6	6.16	5.38	4.50	21.03	-24.8	-33.0	-39.4	0.31	2.09	-86.00	-111.5	-132.7	-153.0	851.6	-151.20
28.00	3.90	1042.9	1040.4	1038.6	5.94	5.20	4.35	21.14	-25.0	-32.3	-38.7	0.18	2.12	-85.45	-111.1	-133.0	-153.0	1000.0	-152.60

*at 25°C unless mentioned otherwise



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