

Voltage Controlled Oscillator

ZX95-365+

5V Tuning for PLL IC's 335 to 365 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 communication
- defense communication
- radar



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-365-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.
ZX95-365+	335	365	+6	-92	-119	-140	-159	0.5	5	13	300	5	-90	-23	-16	0.2	0.2	5	30

Maximum Ratings

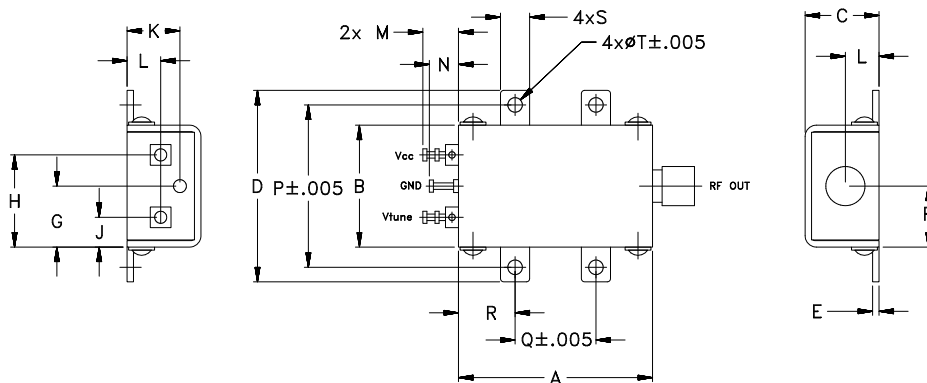
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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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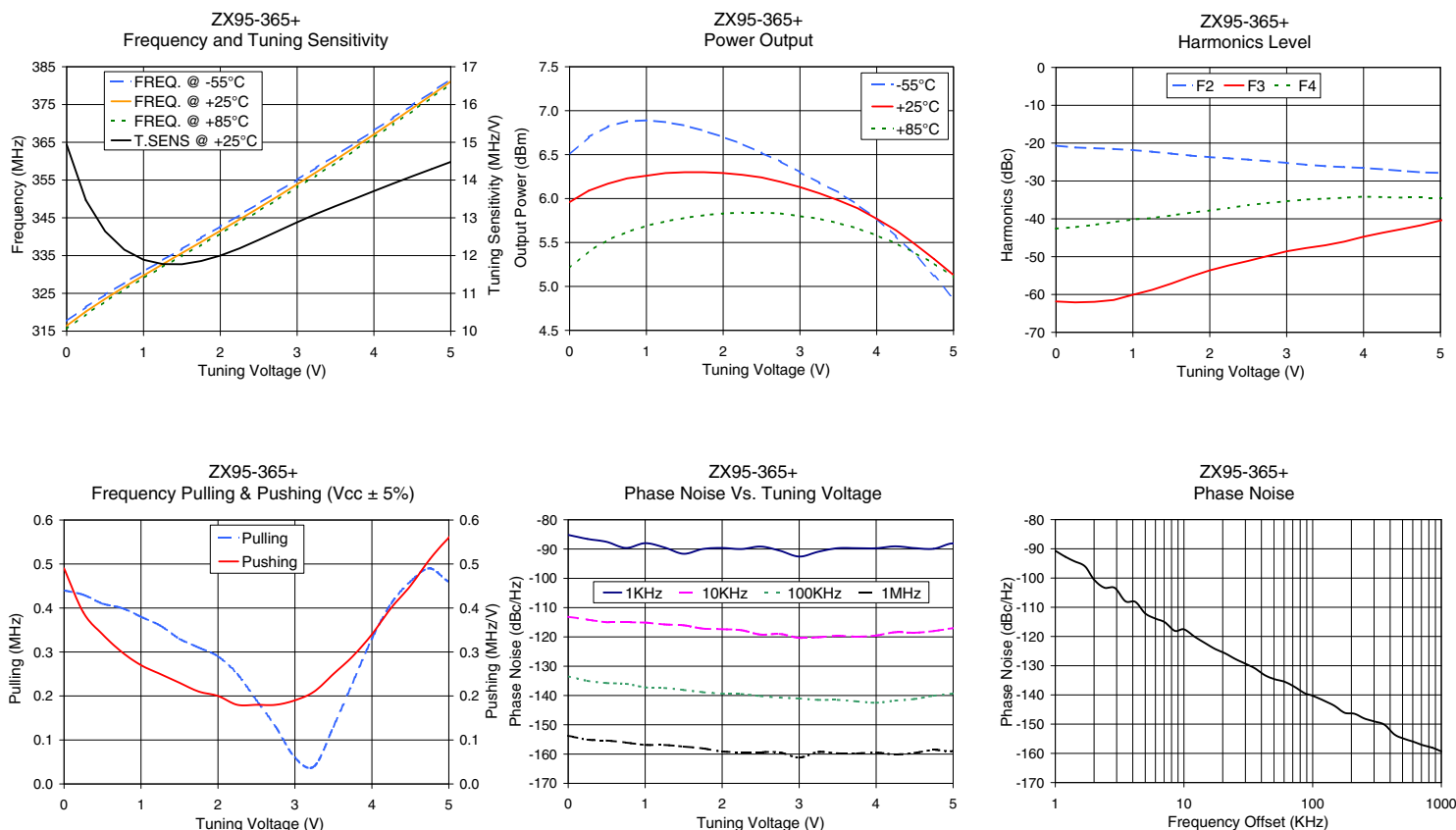


Performance Data & Curves*

ZX95-365+

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 350 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	14.94	317.7	316.4	315.6	6.50	5.96	5.21	20.92	-20.7	-61.8	-42.6	0.49	0.44	-85.2	-113.1	-133.5	-153.8	1.0	-90.67
0.50	12.64	324.7	323.5	322.8	6.82	6.17	5.53	21.35	-21.4	-62.0	-41.6	0.34	0.41	-87.6	-115.0	-135.7	-155.4	2.0	-100.56
0.75	12.16	327.8	326.7	326.0	6.88	6.23	5.62	21.49	-21.6	-61.5	-40.8	0.30	0.40	-89.6	-115.0	-136.0	-156.1	3.5	-107.92
1.00	11.89	330.8	329.7	329.1	6.89	6.26	5.69	21.60	-21.8	-60.1	-40.2	0.27	0.38	-88.0	-115.1	-137.2	-156.9	6.0	-113.87
1.25	11.78	333.8	332.7	332.0	6.87	6.29	5.74	21.69	-22.3	-58.8	-39.8	0.25	0.36	-89.5	-115.7	-137.4	-156.9	8.5	-118.07
1.50	11.77	336.8	335.7	335.0	6.83	6.30	5.78	21.75	-22.8	-57.1	-39.1	0.23	0.33	-91.6	-116.0	-138.1	-157.4	10.0	-117.55
1.75	11.86	339.7	338.6	337.9	6.77	6.30	5.81	21.80	-23.3	-55.3	-38.4	0.21	0.31	-90.0	-117.2	-138.9	-158.1	20.8	-125.73
2.00	12.00	342.7	341.6	340.8	6.70	6.29	5.83	21.83	-23.7	-53.6	-37.8	0.20	0.29	-89.6	-117.4	-139.4	-159.1	35.5	-130.87
2.25	12.19	345.7	344.6	343.8	6.62	6.27	5.84	21.85	-24.0	-52.3	-37.1	0.18	0.25	-90.0	-117.7	-139.5	-159.3	60.7	-135.52
2.50	12.42	348.8	347.6	346.8	6.52	6.24	5.84	21.85	-24.4	-51.1	-36.4	0.18	0.19	-89.2	-119.2	-140.2	-159.3	86.7	-139.41
2.75	12.65	351.9	350.7	349.9	6.42	6.19	5.83	21.84	-24.8	-49.9	-35.8	0.18	0.13	-90.6	-119.0	-140.7	-159.5	100.0	-140.28
3.00	12.88	355.1	353.9	353.1	6.30	6.13	5.80	21.82	-25.2	-48.6	-35.4	0.19	0.06	-92.6	-120.3	-141.0	-161.2	148.1	-143.74
3.25	13.11	358.3	357.1	356.3	6.18	6.06	5.77	21.78	-25.7	-47.7	-34.9	0.21	0.04	-90.9	-120.1	-141.5	-159.3	177.0	-146.11
3.50	13.31	361.5	360.4	359.5	6.07	5.98	5.72	21.72	-26.1	-47.0	-34.7	0.25	0.13	-89.7	-119.6	-141.5	-159.8	211.6	-146.44
3.75	13.51	364.8	363.7	362.9	5.93	5.89	5.66	21.66	-26.4	-46.0	-34.4	0.29	0.23	-89.7	-119.9	-142.0	-159.8	302.4	-149.10
4.00	13.71	368.1	367.1	366.3	5.77	5.77	5.58	21.58	-26.6	-44.7	-34.1	0.34	0.33	-89.7	-119.5	-142.5	-159.5	361.5	-150.19
4.25	13.91	371.5	370.5	369.8	5.57	5.64	5.49	21.49	-26.9	-43.7	-34.3	0.40	0.41	-89.1	-118.4	-141.8	-160.1	507.5	-154.91
4.50	14.10	374.9	374.0	373.3	5.36	5.48	5.38	21.38	-27.3	-42.7	-34.4	0.45	0.46	-89.7	-118.6	-141.2	-159.6	606.7	-156.03
4.75	14.29	378.3	377.5	376.8	5.12	5.31	5.26	21.27	-27.7	-41.7	-34.4	0.51	0.49	-89.9	-118.0	-140.1	-158.6	851.6	-158.07
5.00	14.48	381.8	381.1	380.4	4.86	5.13	5.11	21.16	-27.9	-40.4	-34.5	0.56	0.46	-88.1	-117.0	-139.3	-159.0	1000.0	-159.33

*at 25°C unless mentioned otherwise



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