

Coaxial

Voltage Controlled Oscillator

ZX95-2952A+

5V Tuning for PLL IC's 2748 to 2952 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- WiMAX



CASE STYLE: GB956

Connectors Model
SMA ZX95-2952A-S+

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

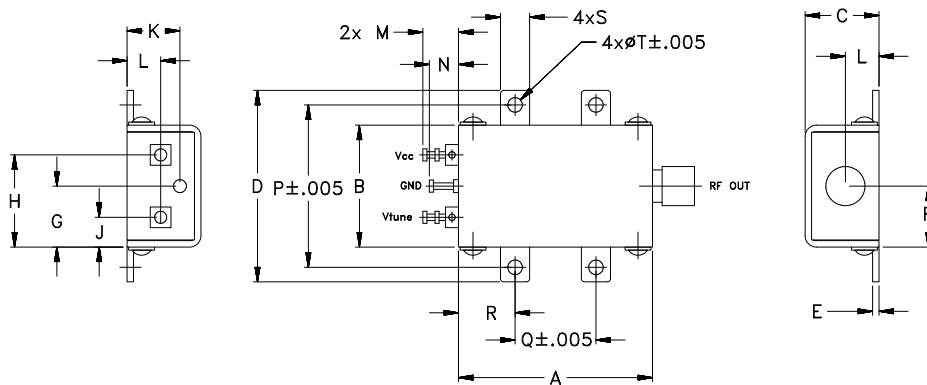
Electrical Specifications

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.	Typ.	Vcc (volts)	Current (mA)
ZX95-2952A+	2748	2952	+4.5	-70	-98	-119	-139	0.5	4.5	70-99	20	40	-90	-21	-15	1.5	1	5	40			

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

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

Performance Data & Curves*

ZX95-2952A+

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 2850 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	119.66	2644.7	2626.0	2612.7	4.28	4.57	4.67	29.52	-23.6	-42.7	-46.2	0.09	0.68	-70.57	-97.3	-118.9	-139.0	1.0	-70.43
0.25	108.90	2673.3	2656.0	2643.7	4.38	4.60	4.58	29.60	-23.3	-42.1	-46.2	0.61	1.16	-69.00	-98.6	-119.6	-139.8	2.0	-79.56
0.50	103.23	2700.0	2683.2	2671.4	4.32	4.61	4.69	29.66	-23.9	-43.4	-46.4	0.94	0.71	-70.32	-98.2	-119.8	-140.0	3.5	-86.51
0.75	98.42	2725.2	2709.0	2697.5	4.46	4.62	4.65	29.74	-24.4	-44.3	-48.5	1.16	0.96	-72.16	-98.3	-120.4	-140.3	6.0	-93.27
1.00	96.08	2749.6	2733.6	2722.3	4.34	4.76	4.77	29.80	-24.6	-42.8	-48.0	1.31	1.02	-73.01	-98.7	-120.6	-140.5	8.5	-96.67
1.25	94.93	2773.7	2757.6	2746.4	4.22	4.59	4.77	29.88	-23.2	-42.5	-49.2	1.39	0.63	-72.51	-98.6	-120.7	-140.7	10.0	-98.49
1.50	92.65	2797.2	2781.3	2770.1	4.40	4.57	4.60	29.96	-23.2	-42.7	-50.5	1.42	0.79	-72.99	-99.2	-120.8	-140.7	20.8	-105.60
1.75	92.01	2820.4	2804.5	2793.4	4.49	4.73	4.72	30.02	-23.8	-41.2	-51.0	1.37	1.09	-72.22	-98.7	-120.7	-140.8	35.5	-110.79
2.00	91.70	2843.4	2827.5	2816.3	4.41	4.77	4.85	30.08	-22.9	-41.1	-51.3	1.22	0.53	-70.31	-98.3	-120.5	-140.8	60.7	-115.77
2.25	92.07	2866.6	2850.4	2839.1	4.19	4.68	4.83	30.13	-22.6	-42.0	-50.8	1.00	0.99	-71.36	-98.4	-120.1	-140.3	86.7	-119.03
2.50	90.62	2889.7	2873.5	2861.9	4.27	4.52	4.67	30.20	-22.3	-42.5	-51.3	0.68	1.04	-71.51	-97.9	-119.9	-140.0	100.0	-120.09
2.75	89.69	2912.6	2896.1	2884.5	4.60	4.68	4.63	30.24	-22.2	-42.8	-53.7	0.38	0.40	-71.98	-98.1	-119.4	-139.5	148.1	-124.12
3.00	88.33	2935.6	2918.5	2906.7	4.52	4.94	4.91	30.23	-22.2	-41.8	-54.7	0.07	0.70	-70.14	-97.9	-118.9	-139.1	177.0	-125.23
3.25	82.91	2957.7	2940.6	2928.6	4.36	4.82	5.02	30.25	-22.1	-42.5	-54.4	0.24	1.01	-70.89	-96.7	-118.5	-138.7	211.6	-126.99
3.50	75.09	2978.0	2961.3	2949.5	4.46	4.71	4.83	30.29	-21.7	-43.6	-59.0	0.46	0.52	-70.43	-97.2	-118.9	-139.0	361.5	-131.31
3.75	68.21	2996.6	2980.1	2968.6	4.56	4.80	4.82	30.31	-21.8	-41.6	-61.6	0.58	0.49	-70.85	-97.1	-119.2	-139.5	507.5	-134.40
4.00	60.45	3013.2	2997.2	2985.8	4.63	4.87	4.92	30.32	-21.2	-41.6	-57.8	0.61	0.77	-70.62	-97.3	-119.4	-139.8	606.7	-135.69
4.25	53.70	3028.0	3012.3	3001.2	4.67	4.93	4.97	30.35	-21.9	-41.9	-57.7	0.56	0.87	-72.05	-98.6	-119.9	-140.0	851.6	-138.56
4.50	47.53	3041.0	3025.7	3014.8	4.64	4.98	5.03	30.37	-22.0	-43.3	-60.0	0.41	0.49	-71.12	-98.3	-120.1	-140.3	1000.0	-140.29

*at 25°C unless mentioned otherwise

