

Voltage Controlled Oscillator

ZX95-2755+

Linear Tuning 2300 to 2755 MHz

Features

- linear tuning characteristics
- low pushing
- protected by US patent 6,790,049

Applications

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



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2755-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)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Max.	Typ.	Max.
ZX95-2755+	2300	2755	+8	-74	-100	-120	-140	0.5	13	40-55	20	600	-90	-17	-10	9	1.5	5	30

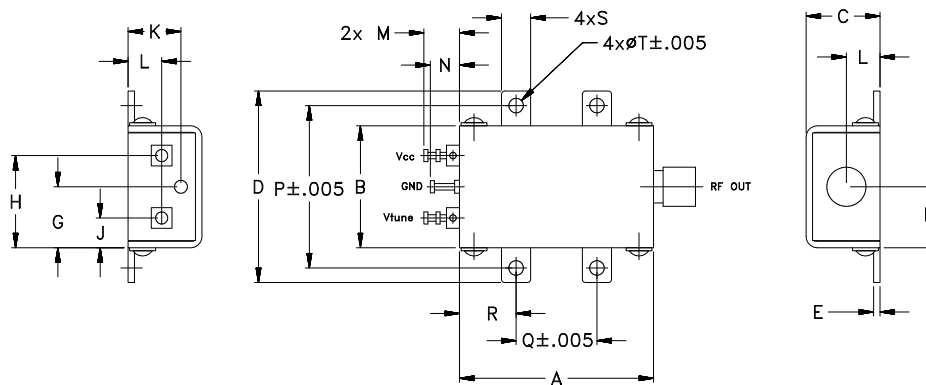
Maximum Ratings

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)	15V
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

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

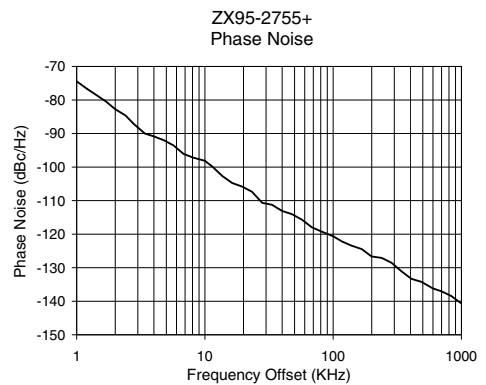
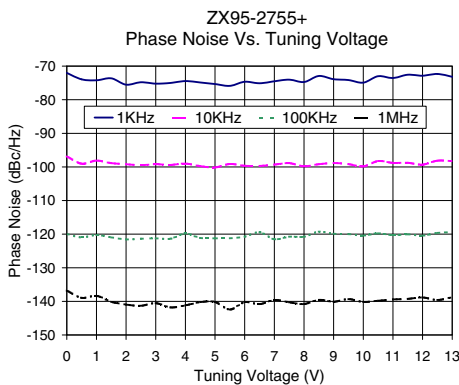
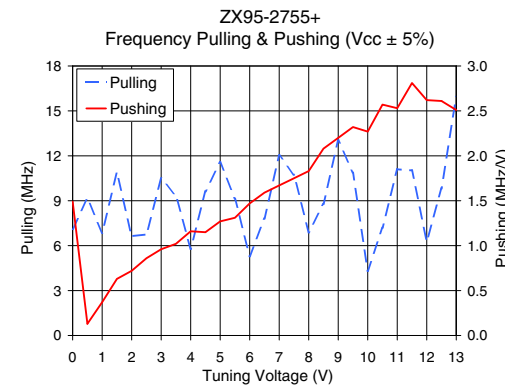
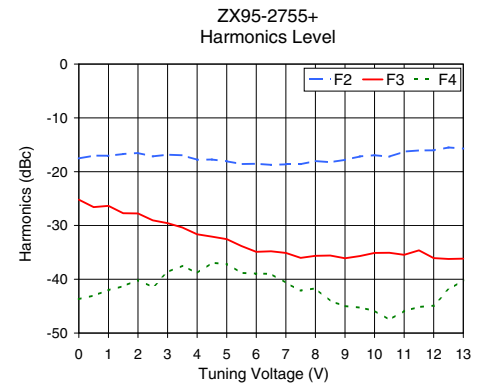
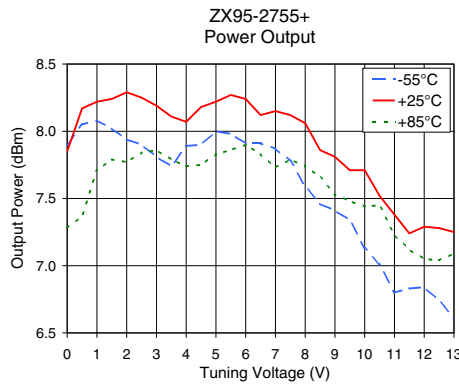
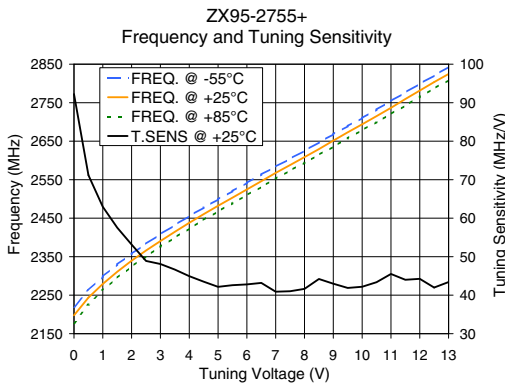


Performance Data & Curves*

ZX95-2755+

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 2530 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	92.23	2219.7	2197.6	2177.6	7.90	7.85	7.28	23.08	-17.6	-25.2	-43.7	1.49	7.10	-72.0	-96.9	-120.0	-136.8	1.0	-74.45
0.50	71.17	2262.9	2243.7	2225.5	8.05	8.17	7.37	23.24	-17.0	-26.6	-43.0	0.13	9.15	-73.9	-99.0	-121.0	-139.0	2.0	-82.75
1.00	62.96	2298.3	2279.3	2262.9	8.08	8.22	7.71	23.25	-17.0	-26.4	-42.0	0.37	6.86	-74.2	-98.1	-120.2	-138.4	3.4	-90.00
1.50	57.55	2329.8	2310.8	2295.1	8.02	8.24	7.79	23.28	-16.7	-27.7	-41.3	0.63	10.88	-73.6	-98.9	-120.9	-140.1	5.7	-93.56
2.00	53.15	2357.2	2339.6	2324.3	7.94	8.29	7.77	23.37	-16.5	-27.8	-40.2	0.72	6.64	-75.5	-99.2	-121.6	-141.0	8.1	-97.20
2.50	48.91	2383.5	2366.1	2350.7	7.90	8.25	7.84	23.43	-17.2	-29.1	-41.5	0.86	6.75	-74.8	-99.5	-121.4	-141.3	10.0	-98.13
3.00	48.10	2408.5	2390.6	2375.9	7.81	8.19	7.86	23.45	-16.9	-29.6	-38.7	0.96	10.49	-75.2	-99.2	-121.3	-140.5	19.6	-105.85
3.50	46.66	2432.1	2414.7	2399.8	7.74	8.11	7.79	23.47	-17.0	-30.4	-37.5	1.02	9.34	-75.0	-99.4	-121.4	-141.8	33.3	-111.24
4.00	44.95	2455.5	2438.0	2423.0	7.89	8.07	7.74	23.49	-17.8	-31.6	-38.9	1.16	5.79	-74.5	-99.0	-119.8	-141.2	57.2	-115.71
5.00	42.18	2499.1	2482.2	2467.5	8.00	8.22	7.83	23.60	-18.1	-32.5	-37.2	1.27	11.57	-75.3	-100.2	-121.2	-140.2	81.8	-119.29
5.50	42.60	2520.4	2503.3	2489.0	7.98	8.27	7.86	23.63	-18.6	-33.8	-38.8	1.31	9.14	-75.9	-99.1	-121.2	-142.4	100.0	-120.61
6.00	42.80	2541.7	2524.6	2509.8	7.91	8.24	7.90	23.62	-18.5	-34.9	-39.0	1.47	5.29	-74.7	-99.7	-120.8	-140.2	139.3	-123.43
6.50	43.20	2563.4	2546.0	2531.2	7.91	8.12	7.83	23.64	-18.7	-34.8	-39.0	1.59	7.82	-75.1	-99.7	-119.4	-140.8	167.3	-124.45
7.00	40.91	2583.7	2567.6	2552.5	7.87	8.15	7.73	23.70	-18.6	-35.1	-40.7	1.67	12.03	-74.5	-99.3	-121.5	-139.6	199.2	-126.64
8.00	41.64	2624.9	2608.6	2593.9	7.59	8.06	7.74	23.77	-18.0	-35.7	-41.7	1.83	6.89	-74.7	-99.8	-120.8	-140.8	284.8	-128.52
9.00	42.98	2668.1	2651.5	2635.7	7.41	7.81	7.53	23.78	-17.8	-36.1	-45.0	2.20	13.04	-73.9	-98.8	-119.9	-140.1	342.1	-131.12
10.00	42.19	2710.0	2693.9	2678.8	7.13	7.71	7.44	23.91	-16.9	-35.1	-45.8	2.27	4.31	-74.9	-99.9	-120.4	-140.2	489.1	-134.23
11.00	45.51	2754.4	2736.7	2720.8	6.80	7.38	7.23	23.91	-16.3	-35.5	-45.9	2.53	11.10	-73.5	-98.8	-120.3	-139.4	600.0	-136.20
12.00	44.25	2799.1	2781.5	2765.2	6.84	7.29	7.05	23.98	-16.0	-36.1	-44.9	2.62	6.29	-72.9	-99.3	-120.4	-138.8	832.6	-138.43
13.00	43.40	2843.1	2824.6	2808.4	6.61	7.25	7.09	24.04	-15.7	-36.2	-40.2	2.51	15.94	-73.2	-98.3	-119.4	-138.8	1000.0	-140.63

*at 25°C unless mentioned otherwise



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

