

Coaxial

Voltage Controlled Oscillator

ZX95-716LV+

Linear Tuning 534 to 716 MHz

Features

- very low phase noise
- linear tuning characteristics
- low pulling
- low pushing
- protected by US patent 6,790,049



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-716LV-S+

Applications

- r & d
- lab
- instrumentation
- wireless communications
- wireless broadband access

+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)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Typ.	Typ.
ROS-716LV+	534	716	-2.6	-84	-113	-133	-153	0.5	11.5	15-21	57	10	-90	-26	-10	0.3	1	3.3	20

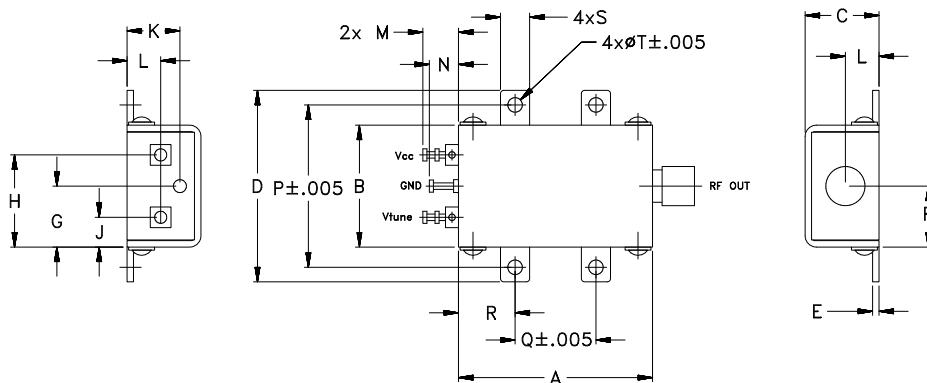
Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	5V
Absolute Max. Tuning Voltage (Vtune)	14V
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



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

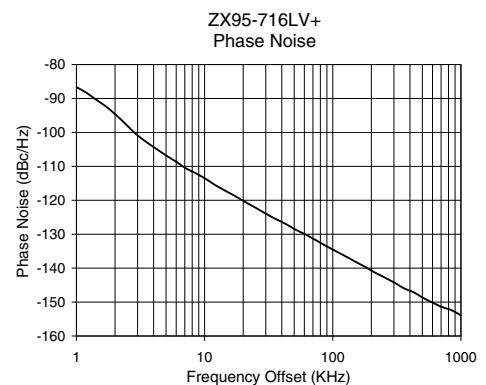
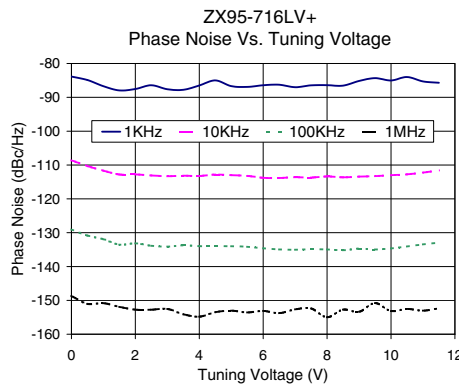
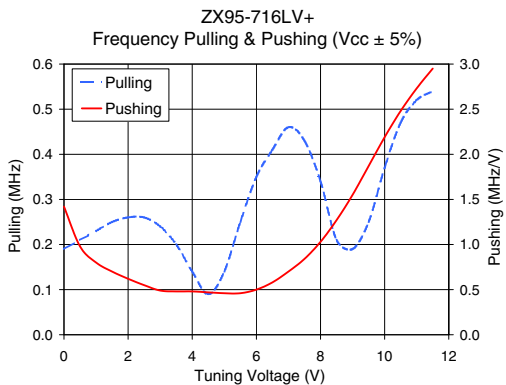
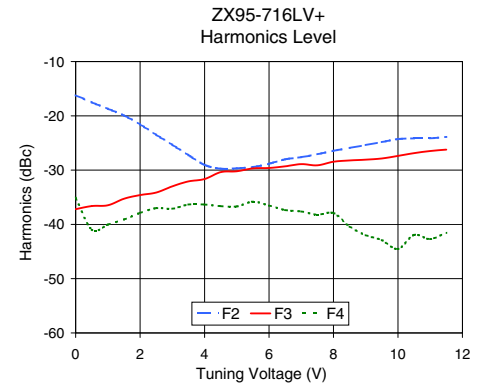
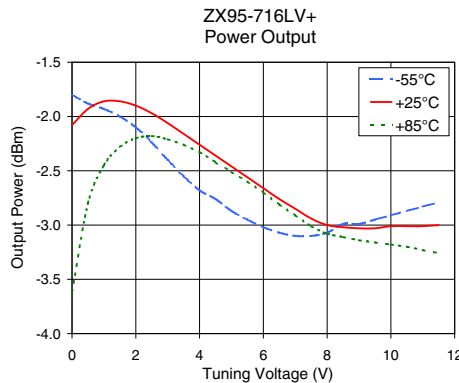
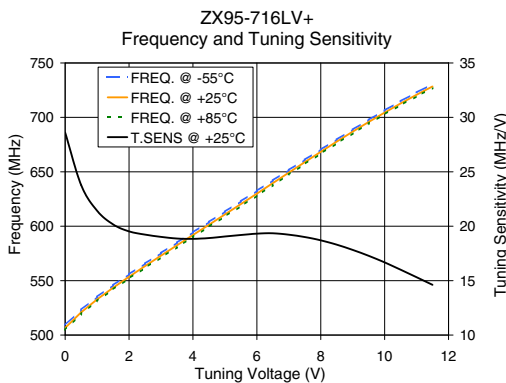
REV. A
M152326
EDR-9674/1F2
ZX95-716LV+
RAV
150923
Page 1 of 2

Performance Data & Curves*

ZX95-716LV+

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 625 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	28.61	509.1	506.6	504.7	-1.80	-2.08	-3.62	13.63	-16.2	-37.2	-35.1	1.42	0.19	-83.9	-108.6	-129.0	-148.7	1.0	-86.63
0.50	23.78	523.2	520.9	519.3	-1.88	-1.93	-2.80	13.73	-17.5	-36.6	-41.0	0.98	0.21	-84.9	-110.3	-130.9	-151.0	2.0	-94.62
1.00	21.42	535.1	532.8	531.3	-1.93	-1.86	-2.45	13.81	-18.7	-36.5	-40.1	0.80	0.23	-86.7	-111.7	-131.9	-150.8	3.5	-102.81
1.50	20.17	545.8	543.5	542.0	-2.00	-1.86	-2.28	13.86	-19.9	-35.3	-39.1	0.70	0.25	-88.0	-112.8	-133.5	-151.9	6.0	-108.65
2.00	19.53	555.8	553.6	552.0	-2.10	-1.90	-2.20	13.89	-21.6	-34.6	-37.9	0.62	0.26	-87.6	-112.8	-133.1	-152.7	8.5	-112.01
2.50	19.23	565.6	563.4	561.7	-2.24	-1.97	-2.18	13.91	-23.5	-34.1	-37.0	0.55	0.26	-86.4	-113.1	-133.9	-152.8	10.0	-113.51
3.00	19.02	575.3	573.0	571.3	-2.40	-2.06	-2.21	13.91	-25.3	-33.0	-37.1	0.49	0.24	-87.6	-113.3	-134.1	-152.5	20.8	-120.53
4.00	18.84	594.3	591.9	590.1	-2.68	-2.26	-2.33	13.88	-29.1	-31.6	-36.4	0.48	0.14	-86.5	-113.3	-134.0	-154.8	35.5	-125.43
5.00	19.05	613.3	610.8	608.9	-2.87	-2.46	-2.51	13.82	-29.7	-30.2	-36.7	0.46	0.14	-86.7	-113.0	-134.0	-153.0	60.7	-130.02
5.50	19.20	622.9	620.3	618.4	-2.95	-2.56	-2.60	13.78	-29.4	-29.7	-35.8	0.46	0.25	-86.9	-113.2	-134.2	-153.6	86.7	-133.26
6.00	19.32	632.4	629.9	628.0	-3.02	-2.66	-2.70	13.75	-28.8	-29.6	-36.5	0.50	0.35	-86.4	-113.8	-134.6	-153.1	100.0	-134.52
6.50	19.35	642.0	639.6	637.7	-3.07	-2.76	-2.81	13.72	-28.0	-29.3	-37.4	0.58	0.41	-86.3	-113.9	-135.0	-153.8	148.1	-137.97
7.00	19.22	651.6	649.3	647.4	-3.10	-2.85	-2.91	13.69	-27.6	-28.9	-37.6	0.70	0.46	-87.0	-113.6	-135.0	-152.7	177.0	-139.54
8.00	18.71	670.3	668.4	666.7	-3.07	-3.00	-3.08	13.65	-26.4	-28.5	-37.9	1.03	0.34	-86.4	-113.4	-134.9	-155.0	211.6	-141.21
9.00	17.82	688.7	686.9	685.3	-2.99	-3.03	-3.14	13.65	-25.4	-28.1	-42.0	1.55	0.19	-85.2	-113.4	-134.7	-153.4	302.4	-144.28
9.50	17.28	697.7	695.8	694.2	-2.95	-3.03	-3.16	13.65	-24.8	-27.9	-42.9	1.87	0.25	-84.3	-113.3	-135.0	-150.8	361.5	-145.98
10.00	16.68	706.4	704.4	702.9	-2.91	-3.01	-3.18	13.65	-24.3	-27.4	-44.5	2.19	0.37	-85.0	-113.0	-134.7	-153.2	507.5	-148.79
10.50	16.01	714.8	712.8	711.2	-2.87	-3.01	-3.20	13.65	-24.2	-26.9	-41.9	2.48	0.47	-84.0	-112.8	-134.1	-152.5	606.7	-150.25
11.00	15.32	722.9	720.8	719.3	-2.83	-3.01	-3.23	13.65	-24.1	-26.5	-42.7	2.73	0.52	-85.3	-112.3	-133.5	-153.0	851.6	-152.44
11.50	14.62	730.6	728.4	726.9	-2.79	-3.00	-3.26	13.65	-23.9	-26.2	-41.5	2.95	0.54	-85.7	-111.6	-133.0	-152.4	1000.0	-153.92

*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

