

Coaxial

# Voltage Controlled Oscillator

## ZX95-753+

Linear Tuning 734 to 753 MHz

### Features

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

### Applications

- r & d
- lab
- Instrumentation
- wireless communication
- TETRA



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-753-S+	\$40.95 ea.	(1-9)

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

### Electrical Specifications

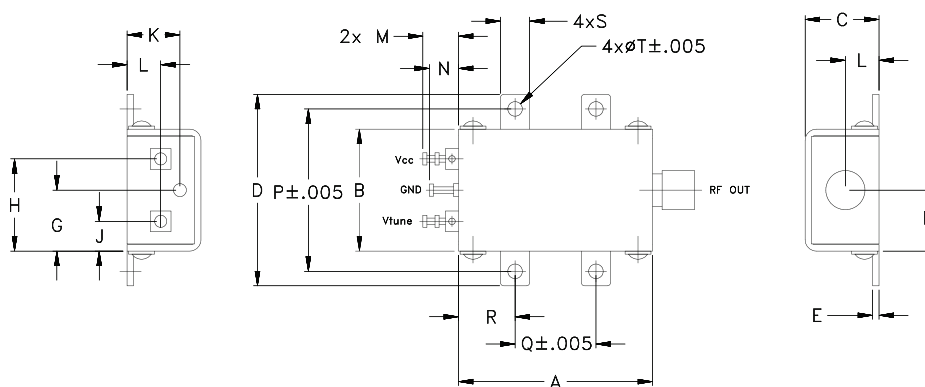
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Typ.	Typ.
ZX95-753+	734	753	+3	-94	-121	-141	-161	1	9	8	70	40	-90	-25	-15	0.3	0.2	5	35

### 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)	10V
All specifications	50 ohm system

Permanent damage may occur if any of these limits are exceeded.

### 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



For detailed performance specs & shopping online see web site

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**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

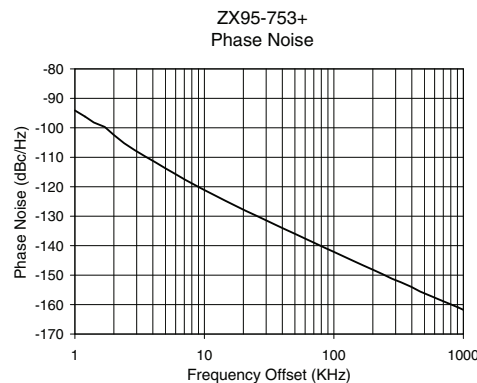
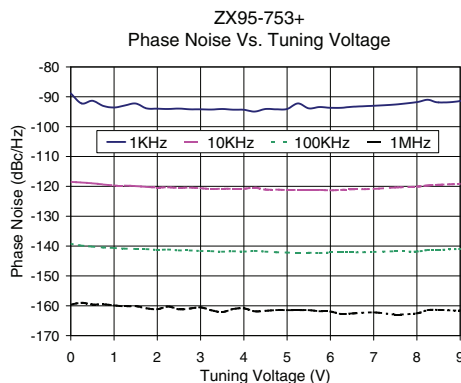
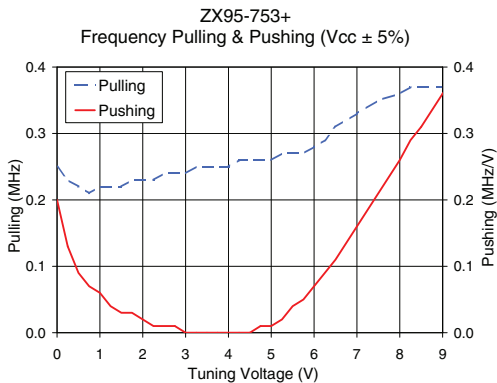
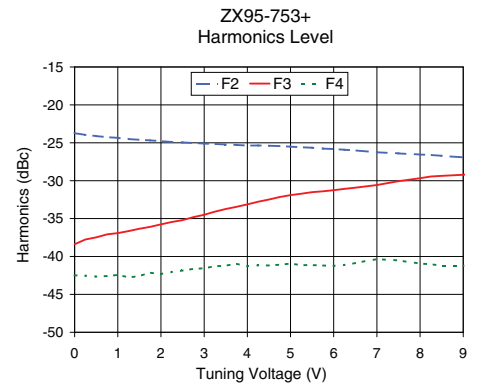
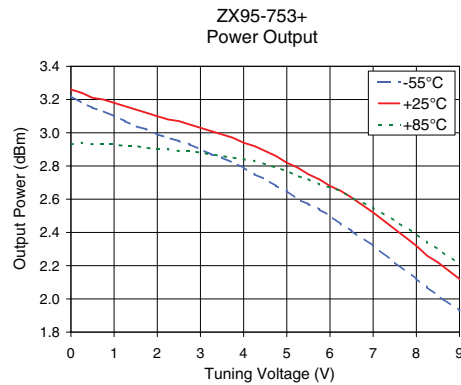
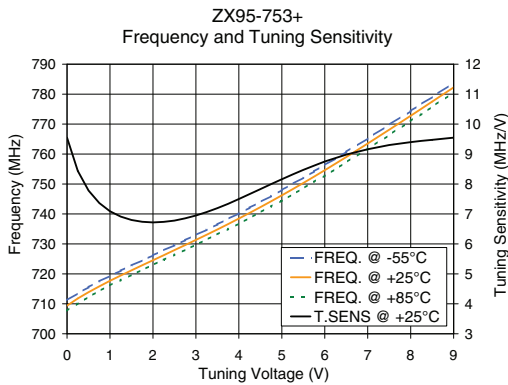
REV. OR  
M115158  
EDR-8517F2  
ZX95-753+  
RAV  
120830  
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# Performance Data & Curves\*

# ZX95-753+

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 744 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	9.55	711.2	709.4	707.7	3.22	3.26	2.93	25.42	-23.7	-38.4	-42.5	0.20	0.25	-88.9	-118.5	-139.2	-159.6	1.0	-94.11
0.50	7.78	715.6	713.9	712.3	3.15	3.21	2.93	25.43	-24.1	-37.5	-42.7	0.09	0.22	-91.3	-119.0	-140.2	-159.6	2.0	-102.42
1.00	7.09	719.3	717.7	716.1	3.10	3.18	2.93	25.43	-24.4	-36.9	-42.4	0.06	0.22	-93.6	-119.7	-140.6	-159.9	3.5	-109.75
1.50	6.80	722.8	721.2	719.6	3.04	3.14	2.92	25.43	-24.6	-36.3	-42.6	0.03	0.22	-92.2	-119.9	-141.0	-160.1	6.0	-115.74
2.00	6.72	726.2	724.6	723.0	2.99	3.10	2.90	25.43	-24.8	-35.8	-42.3	0.02	0.23	-94.0	-120.4	-141.3	-161.2	8.5	-119.47
2.50	6.78	729.6	727.9	726.4	2.95	3.07	2.89	25.43	-25.0	-35.2	-41.9	0.01	0.24	-93.9	-120.5	-141.4	-161.2	10.0	-121.11
3.00	6.95	733.0	731.3	729.7	2.90	3.03	2.88	25.42	-25.1	-34.5	-41.6	0.00	0.24	-94.2	-120.6	-141.6	-160.5	20.8	-128.13
3.50	7.20	736.5	734.8	733.2	2.85	2.99	2.86	25.41	-25.2	-33.7	-41.2	0.00	0.25	-94.1	-120.8	-141.9	-162.1	35.5	-132.94
4.00	7.50	740.2	738.5	736.8	2.79	2.94	2.84	25.40	-25.4	-33.1	-41.3	0.00	0.25	-94.3	-120.8	-141.9	-160.9	60.7	-137.70
4.50	7.83	744.0	742.3	740.5	2.72	2.89	2.81	25.38	-25.4	-32.5	-41.2	0.00	0.26	-94.1	-121.1	-141.9	-161.7	85.2	-140.74
4.75	8.00	746.0	744.2	742.5	2.68	2.86	2.79	25.37	-25.4	-32.2	-41.1	0.01	0.26	-94.2	-121.1	-142.1	-161.4	100.0	-142.12
5.00	8.16	748.0	746.2	744.5	2.65	2.82	2.77	25.36	-25.5	-31.9	-40.9	0.01	0.26	-94.1	-121.2	-142.2	-161.5	142.9	-145.27
5.50	8.47	752.1	750.3	748.6	2.57	2.75	2.72	25.33	-25.7	-31.5	-41.1	0.04	0.27	-93.9	-121.2	-142.2	-161.5	167.8	-146.67
6.00	8.75	756.4	754.6	752.8	2.50	2.68	2.67	25.30	-25.8	-31.3	-41.2	0.07	0.28	-93.7	-121.3	-142.2	-161.9	200.6	-148.18
6.50	8.98	760.7	759.0	757.2	2.41	2.61	2.61	25.27	-26.0	-30.9	-40.9	0.11	0.31	-93.3	-121.0	-142.2	-162.6	281.6	-151.22
7.00	9.16	765.2	763.5	761.8	2.32	2.52	2.55	25.23	-26.3	-30.6	-40.3	0.16	0.33	-93.0	-120.9	-142.0	-162.2	330.7	-152.46
8.00	9.40	774.4	772.8	771.1	2.12	2.32	2.39	25.16	-26.6	-29.7	-40.9	0.26	0.36	-91.8	-120.1	-141.8	-162.5	464.2	-155.57
8.25	9.44	776.7	775.1	773.4	2.07	2.26	2.34	25.15	-26.6	-29.5	-41.0	0.29	0.37	-91.0	-119.7	-141.3	-161.4	554.9	-157.00
8.50	9.47	779.1	777.5	775.8	2.02	2.22	2.30	25.13	-26.7	-29.4	-41.2	0.31	0.37	-91.9	-119.5	-141.3	-161.4	914.6	-160.98
9.00	9.55	783.8	782.2	780.5	1.93	2.12	2.21	25.10	-26.9	-29.2	-41.2	0.36	0.37	-91.4	-119.2	-141.0	-161.6	1000.0	-161.77

\*at 25°C unless mentioned otherwise



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