

Coaxial

# Voltage Controlled Oscillator

## ZX95-3350+

Linear Tuning 3200 to 3350 MHz

### Features

- Linear tuning characteristics
- Low pulling
- Low pushing
- Protected by US patent 6,790,049



CASE STYLE: GB956

### Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Radio link

Connectors	Model	Price	Qty.
SMA	ZX95-3350-S+	\$40.95 ea.	(1-9)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

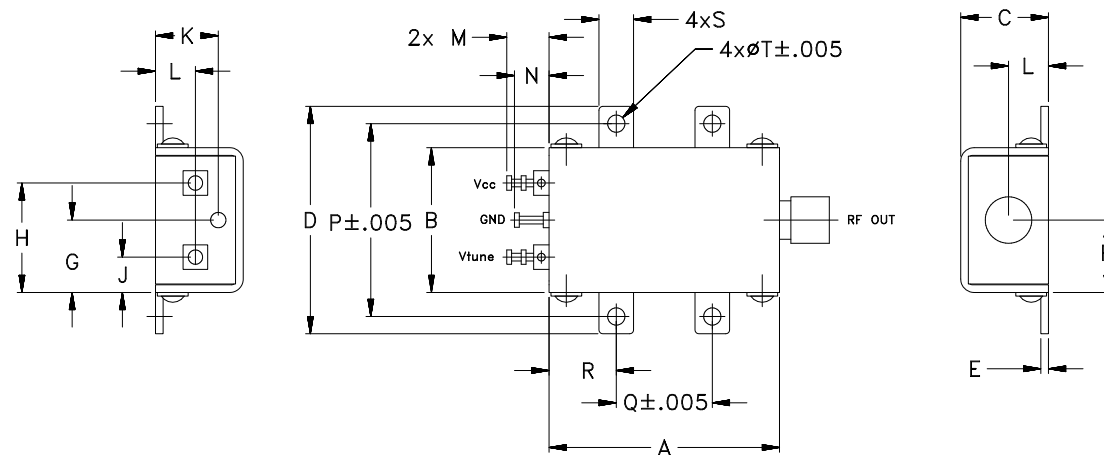
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-3350+	3200	3350	+5	-73	-97	-118	-138	0.5	10	33	50	250	-90	-30	-20	1	2	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)	12V
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	.45	.57	.18	.33	.21	.22	.18	1.00	.50	.35	.18	.106	GRAM
30.48	19.05	11.68	29.97	1.02	9.65	11.43	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

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

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).

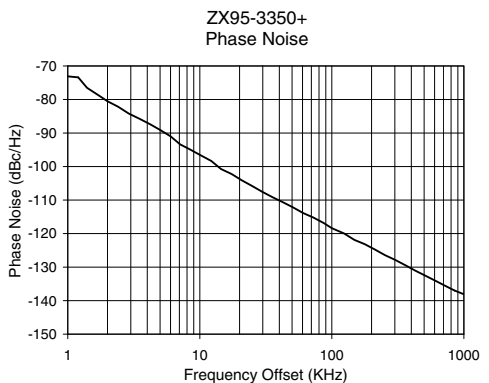
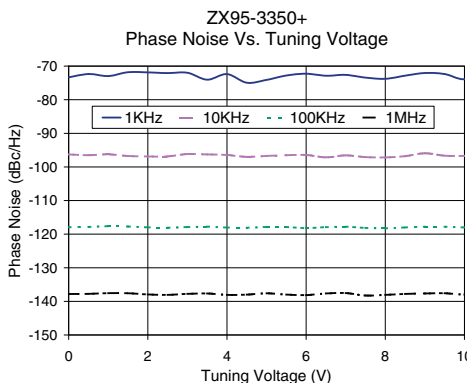
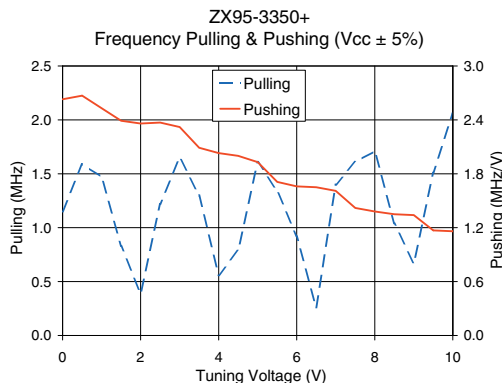
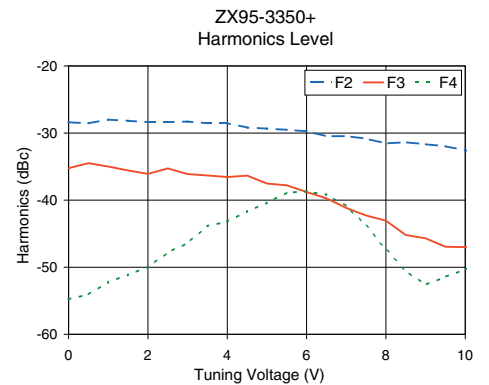
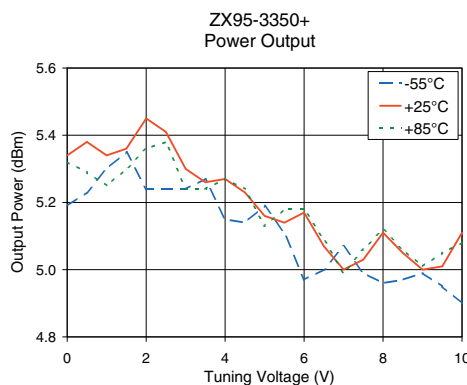
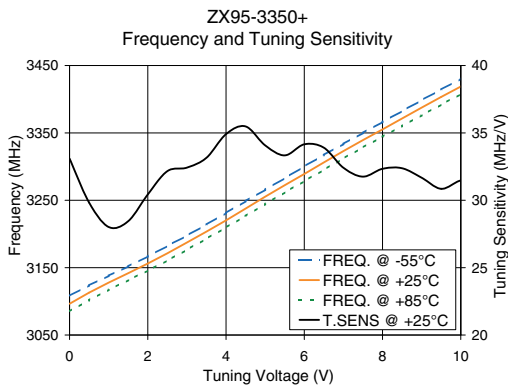
REV. OR  
M108877  
EDR-7879  
ZX95-3350+  
RAV  
090903  
page 1 of 2

# Performance Data & Curves\*

# ZX95-3350+

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 3275 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	33.09	3108.1	3096.4	3085.2	5.19	5.34	5.32	33.41	-28.4	-35.2	-54.8	2.63	1.15	-73.3	-96.3	-117.9	-137.8	1.0	-73.09
0.50	29.83	3123.7	3112.9	3101.7	5.23	5.38	5.29	33.39	-28.6	-34.5	-54.1	2.67	1.59	-72.4	-96.5	-117.9	-137.8	2.0	-80.54
1.00	28.02	3137.9	3127.8	3117.1	5.30	5.34	5.25	33.43	-28.0	-35.0	-52.2	2.53	1.47	-73.0	-96.3	-117.6	-137.6	3.5	-85.78
1.50	28.45	3152.0	3141.8	3131.4	5.35	5.36	5.30	33.46	-28.2	-35.6	-51.1	2.39	0.83	-71.8	-96.8	-117.7	-137.6	6.0	-90.99
2.00	30.43	3166.8	3156.1	3145.7	5.24	5.45	5.36	33.46	-28.4	-36.1	-50.0	2.36	0.39	-71.9	-96.9	-118.0	-137.9	8.5	-94.97
2.50	32.16	3182.1	3171.3	3160.5	5.24	5.41	5.38	33.44	-28.4	-35.3	-47.8	2.37	1.22	-72.1	-96.9	-118.1	-138.1	10.0	-96.52
3.00	32.42	3197.6	3187.4	3176.6	5.24	5.30	5.24	33.44	-28.3	-36.1	-46.4	2.32	1.65	-72.0	-96.2	-117.9	-137.8	20.8	-104.11
3.50	33.16	3213.9	3203.6	3193.0	5.27	5.26	5.24	33.48	-28.5	-36.3	-43.9	2.09	1.30	-74.0	-96.3	-117.8	-137.7	35.5	-109.14
4.00	34.91	3231.2	3220.2	3209.6	5.15	5.27	5.27	33.49	-28.5	-36.6	-43.2	2.03	0.56	-72.4	-96.5	-118.0	-138.1	60.7	-113.90
4.50	35.48	3248.7	3237.6	3226.7	5.14	5.23	5.24	33.48	-29.2	-36.4	-41.7	2.00	0.79	-75.0	-97.0	-118.1	-138.0	86.7	-116.85
5.00	34.07	3265.8	3255.4	3244.4	5.19	5.16	5.13	33.48	-29.3	-37.5	-40.4	1.93	1.61	-74.1	-96.7	-117.9	-137.6	100.0	-118.39
5.50	33.33	3282.9	3272.4	3261.8	5.11	5.14	5.18	33.54	-29.5	-37.8	-38.9	1.71	1.34	-72.8	-96.5	-117.9	-138.0	148.1	-121.88
6.00	34.15	3300.2	3289.1	3278.5	4.97	5.17	5.18	33.53	-29.7	-38.8	-38.7	1.66	0.92	-72.3	-96.5	-118.2	-138.2	177.0	-123.15
6.50	33.90	3317.2	3306.1	3295.2	5.00	5.07	5.09	33.53	-30.5	-39.7	-39.2	1.65	0.26	-72.9	-97.2	-117.9	-137.7	211.6	-124.74
7.00	32.41	3333.7	3323.1	3312.1	5.07	5.00	4.99	33.54	-30.5	-41.2	-40.9	1.61	1.40	-72.6	-96.6	-117.8	-137.5	302.4	-127.88
7.50	31.75	3350.1	3339.3	3328.5	4.99	5.03	5.06	33.60	-30.8	-42.3	-43.8	1.42	1.61	-73.4	-97.1	-118.2	-138.3	361.5	-129.48
8.00	32.34	3366.4	3355.2	3344.3	4.96	5.11	5.12	33.61	-31.6	-43.1	-47.3	1.38	1.71	-73.8	-97.2	-118.3	-138.1	507.5	-132.50
8.50	32.38	3382.5	3371.3	3360.2	4.97	5.05	5.06	33.62	-31.4	-45.2	-50.5	1.35	1.04	-72.9	-96.8	-118.0	-137.8	606.7	-134.05
9.00	31.67	3398.5	3387.5	3376.1	4.99	5.00	5.01	33.64	-31.7	-45.7	-52.6	1.34	0.67	-72.1	-95.9	-117.8	-137.7	851.6	-137.00
10.00	31.47	3430.1	3418.8	3407.5	4.90	5.11	5.08	33.74	-32.6	-47.0	-50.3	1.16	2.06	-73.9	-96.7	-118.0	-138.0	1000.0	-138.10

\*at 25°C unless mentioned otherwise



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

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-Circuits' 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).