

Coaxial

# Voltage Controlled Oscillator

## ZX95-3600C+

5V Tuning for PLL IC's 3500 to 3600 MHz

### Features

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



CASE STYLE: GB956

### Applications

- r & d
- lab
- instrumentation
- wireless communications
- WiMAX 3.5 GHz
- CATV

Connectors	Model	Price	Qty.
SMA	ZX95-3600C-S+	\$ 44.95 ea.	(1-9)

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

### Electrical Specifications

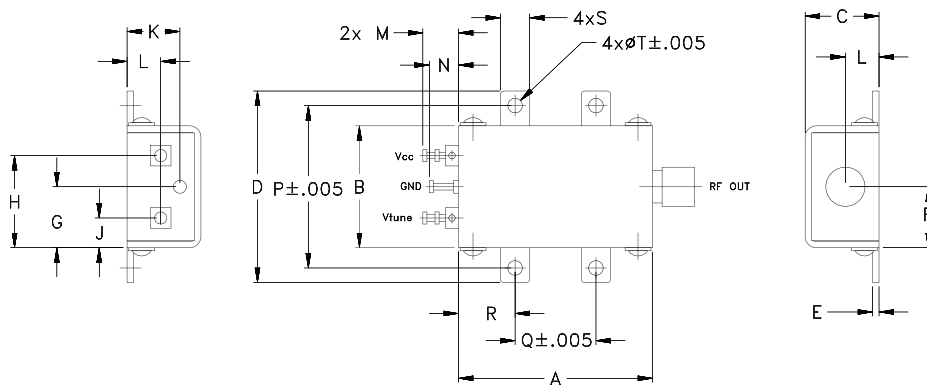
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER				
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.	Max.	Vcc (volts)	Current (mA)
ZX95-3600C+	3500	3600	-0.2	-77	-105	-126	-146	0.5	4.5	52-66	15	105	-90	-16	-10	1	0.3	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

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

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)

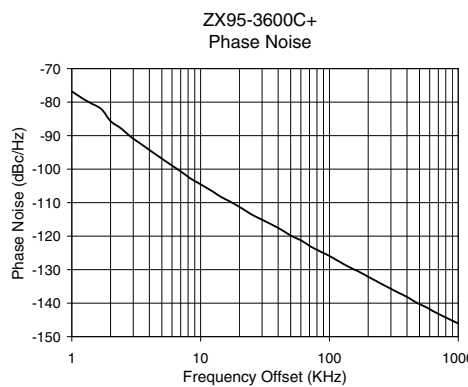
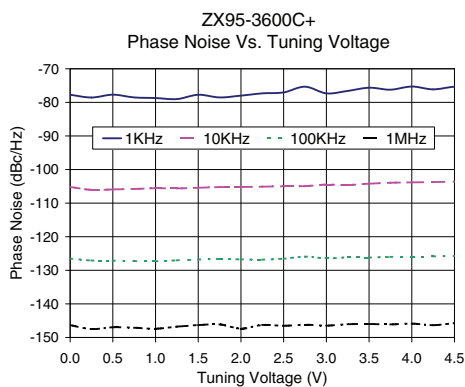
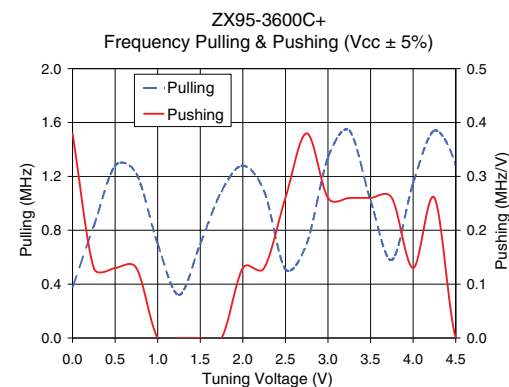
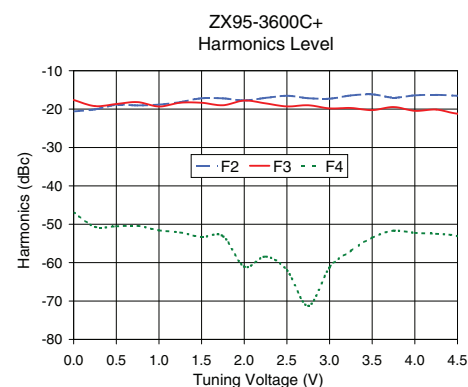
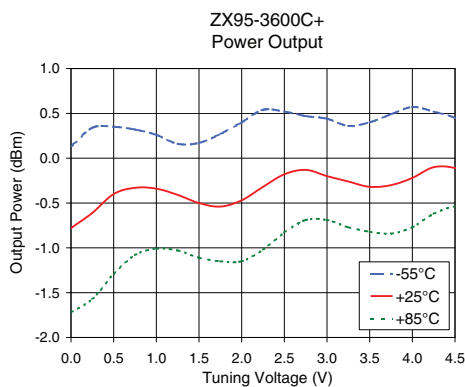
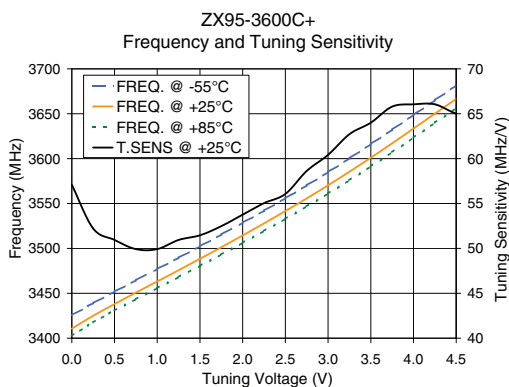
**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established 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).

# Performance Data & Curves\*

# ZX95-3600C+

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 3550 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	57.09	3425.6	3410.7	3402.9	0.13	-0.78	-1.72	31.86	-20.6	-17.6	-46.9	0.38	0.38	-77.7	-105.2	-126.5	-146.3	1.0	-76.79
0.25	52.22	3439.0	3425.0	3417.7	0.34	-0.61	-1.57	31.88	-20.1	-19.2	-50.7	0.13	0.83	-78.6	-106.1	-127.1	-147.5	2.0	-85.66
0.50	50.94	3451.9	3438.0	3430.8	0.35	-0.40	-1.29	31.90	-18.9	-18.7	-50.5	0.13	1.28	-77.7	-105.9	-127.1	-147.0	3.5	-92.69
0.75	49.92	3464.5	3450.8	3443.5	0.32	-0.33	-1.08	31.90	-19.0	-18.2	-50.4	0.13	1.22	-78.5	-105.8	-127.3	-147.1	6.0	-98.92
1.00	49.92	3477.1	3463.2	3455.8	0.26	-0.34	-1.01	31.91	-18.8	-19.3	-51.6	0.00	0.70	-78.7	-105.6	-127.3	-147.4	8.5	-102.98
1.25	50.94	3489.7	3475.7	3468.1	0.16	-0.41	-1.03	31.91	-18.2	-18.3	-52.1	0.00	0.32	-79.0	-105.6	-127.0	-146.8	10.0	-104.53
1.50	51.46	3502.5	3488.4	3480.6	0.17	-0.50	-1.11	31.92	-17.2	-18.3	-53.3	0.00	0.70	-77.8	-105.4	-126.8	-146.3	20.8	-111.65
1.75	52.48	3515.5	3501.3	3493.3	0.27	-0.54	-1.15	31.93	-17.2	-19.0	-53.1	0.00	1.09	-78.5	-105.2	-126.6	-146.1	35.5	-116.51
2.00	53.76	3528.6	3514.4	3506.2	0.40	-0.47	-1.15	31.94	-17.7	-17.8	-61.1	0.13	1.28	-78.0	-105.2	-126.7	-147.4	60.7	-121.36
2.25	55.04	3542.1	3527.9	3519.5	0.54	-0.32	-1.02	31.95	-17.1	-18.5	-58.4	0.13	1.09	-77.3	-105.1	-126.8	-146.3	86.7	-124.73
2.50	56.06	3556.0	3541.6	3533.0	0.52	-0.18	-0.83	31.96	-16.5	-19.3	-61.9	0.26	0.51	-77.0	-105.0	-126.5	-146.5	100.0	-125.91
2.75	58.62	3570.2	3555.6	3546.9	0.47	-0.13	-0.69	31.97	-17.2	-19.0	-71.3	0.38	0.70	-75.3	-105.0	-125.9	-146.2	145.5	-129.41
3.00	60.42	3585.1	3570.3	3561.2	0.44	-0.20	-0.69	31.98	-17.3	-19.8	-61.3	0.26	1.34	-77.3	-104.5	-126.4	-146.5	204.2	-132.31
3.25	62.72	3600.4	3585.4	3576.1	0.36	-0.26	-0.77	31.99	-16.4	-19.7	-56.9	0.26	1.54	-76.6	-104.6	-126.2	-146.1	286.7	-135.32
3.50	64.00	3616.3	3601.1	3591.4	0.40	-0.32	-0.82	32.00	-16.2	-20.3	-53.5	0.26	1.02	-75.6	-104.2	-126.2	-146.0	336.6	-136.72
3.75	65.79	3632.4	3617.1	3607.3	0.49	-0.30	-0.84	32.02	-17.0	-19.5	-51.7	0.26	0.58	-76.2	-103.9	-126.0	-146.1	472.5	-139.82
4.00	66.05	3648.8	3633.5	3623.6	0.57	-0.22	-0.77	32.04	-16.4	-20.5	-52.2	0.13	1.15	-75.3	-103.8	-125.9	-145.9	564.9	-141.24
4.25	66.05	3665.2	3650.0	3640.0	0.52	-0.10	-0.62	32.06	-16.3	-20.1	-52.5	0.26	1.54	-76.1	-103.7	-125.8	-146.4	931.1	-145.49
4.50	65.02	3681.7	3666.6	3656.4	0.45	-0.11	-0.54	32.08	-16.5	-21.2	-53.1	0.00	1.28	-75.4	-103.6	-125.7	-145.7	1000.0	-146.04

\*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)

IF/RF MICROWAVE COMPONENTS

**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).