

Coaxial

# Voltage Controlled Oscillator

## ZX95-2700B+

Linear Tuning 2200 to 2700 MHz

### Features

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



CASE STYLE: GB956

### Applications

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

Connectors	Model	Price	Qty.
SMA	ZX95-2700B-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

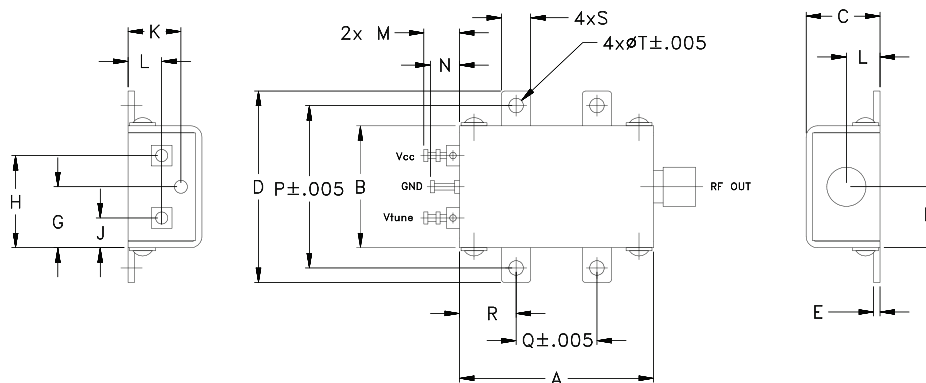
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER			
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.	Typ.	Max.
	Typ.				Typ.		Typ.		Typ.		Typ.										
ZX95-2700B+	2200	2700	+5	-77	-102	-123	-143	0.5	19	40-60	50	55	-90	-18	-10	1	1.5	8	50		

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	10V
Absolute Max. Tuning Voltage (Vtune)	21V
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).

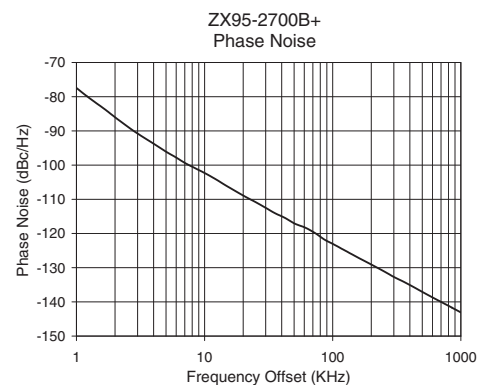
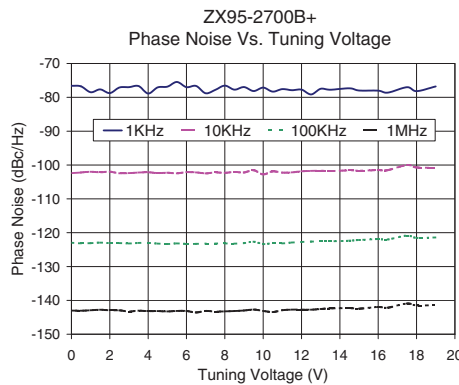
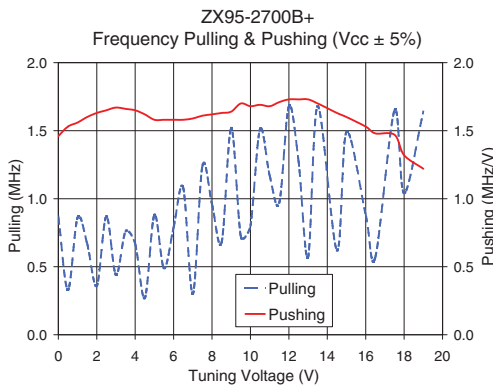
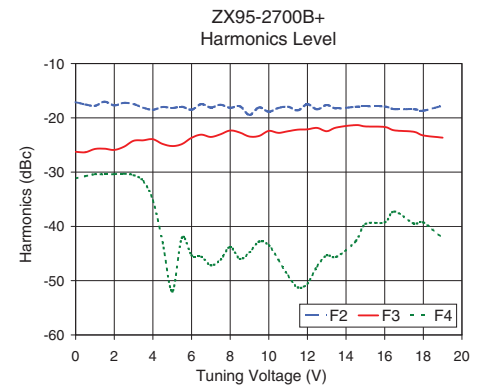
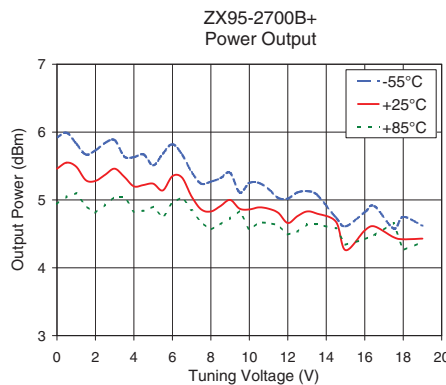
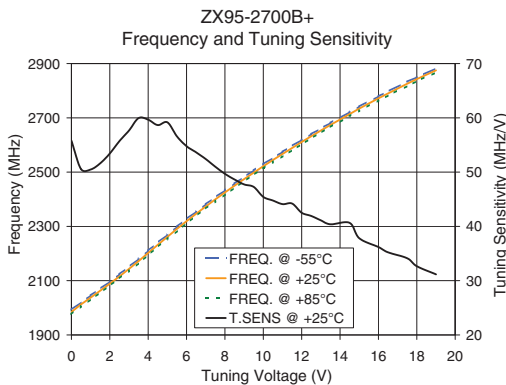
REV. OR  
M125394  
EDR-9003F2  
ZX95-2700B+  
RAV  
120904  
Page 1 of 2

# Performance Data & Curves\*

# ZX95-2700B+

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 2450 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	55.80	1993.0	1984.6	1976.7	5.92	5.46	4.94	41.51	-17.1	-26.3	-31.2	1.46	0.87	-76.6	-102.4	-123.0	-143.0	1.0	-77.44
0.50	50.57	2020.3	2012.5	2005.4	5.99	5.55	5.05	41.59	-17.5	-26.3	-30.7	1.53	0.33	-76.8	-102.2	-123.1	-143.1	2.0	-86.01
1.00	50.47	2045.5	2037.8	2030.9	5.83	5.49	5.10	41.65	-17.8	-25.7	-30.4	1.56	0.86	-78.5	-102.0	-123.1	-142.9	3.5	-92.38
2.00	53.43	2096.6	2088.8	2081.6	5.73	5.28	4.81	41.75	-17.7	-25.9	-30.4	1.63	0.36	-78.7	-102.0	-123.1	-143.0	6.0	-97.79
3.00	57.67	2151.4	2143.4	2135.9	5.88	5.46	5.05	41.88	-17.5	-24.2	-30.6	1.67	0.44	-77.0	-102.4	-123.2	-143.3	8.5	-100.96
4.00	59.66	2210.5	2202.2	2194.4	5.63	5.20	4.83	41.99	-18.5	-23.9	-35.2	1.65	0.67	-78.9	-102.1	-123.0	-143.2	10.0	-102.32
5.00	59.17	2269.7	2261.4	2253.6	5.51	5.24	4.90	42.11	-18.2	-25.2	-52.0	1.58	0.88	-76.8	-102.3	-123.3	-143.3	20.8	-109.26
6.00	54.78	2327.4	2319.2	2311.4	5.82	5.35	4.96	42.22	-18.5	-23.7	-45.3	1.58	0.79	-77.0	-102.1	-123.3	-143.1	35.5	-114.07
7.00	52.40	2381.5	2373.5	2365.7	5.41	5.05	4.85	42.25	-18.1	-23.5	-47.2	1.59	0.30	-78.8	-102.5	-123.2	-143.1	60.7	-118.25
8.00	49.68	2433.0	2425.1	2417.4	5.27	4.83	4.56	42.29	-18.2	-22.3	-43.8	1.62	0.96	-76.5	-102.3	-123.2	-143.3	86.7	-121.84
8.50	48.64	2457.8	2450.0	2442.3	5.32	4.91	4.64	42.30	-17.9	-22.7	-46.0	1.63	0.68	-77.7	-102.1	-123.2	-143.2	100.0	-123.04
9.00	47.74	2482.1	2474.3	2466.5	5.40	5.00	4.73	42.30	-19.5	-23.5	-44.8	1.64	1.52	-77.0	-102.2	-123.1	-143.0	148.1	-126.50
10.00	45.44	2529.7	2521.8	2514.0	5.25	4.86	4.56	42.29	-18.9	-22.4	-43.5	1.68	0.80	-77.1	-102.8	-123.4	-143.1	177.0	-128.02
11.00	44.10	2574.6	2566.9	2559.0	5.16	4.87	4.66	42.28	-18.0	-22.5	-49.1	1.68	1.17	-77.6	-102.3	-123.2	-142.9	211.6	-129.56
12.00	42.52	2618.8	2611.1	2603.0	5.02	4.66	4.49	42.21	-17.5	-22.1	-50.5	1.73	1.68	-77.7	-101.9	-122.8	-142.7	302.4	-132.77
13.50	40.39	2681.3	2673.9	2666.2	5.08	4.80	4.64	42.14	-18.3	-21.8	-45.6	1.70	1.68	-77.7	-101.8	-122.6	-142.4	361.5	-134.19
14.50	40.65	2721.6	2713.9	2706.3	4.74	4.68	4.58	42.05	-18.0	-21.3	-42.7	1.63	0.62	-77.3	-101.6	-122.4	-142.3	507.5	-137.22
16.00	36.20	2779.1	2771.8	2764.2	4.82	4.55	4.42	42.02	-17.9	-21.7	-39.3	1.53	0.88	-78.0	-101.5	-121.9	-142.0	606.7	-138.78
18.00	32.66	2849.8	2842.6	2835.2	4.75	4.42	4.26	41.89	-18.7	-23.2	-39.3	1.32	1.04	-78.2	-100.7	-121.5	-141.5	851.6	-141.68
19.00	31.16	2882.4	2875.1	2867.4	4.62	4.43	4.38	41.80	-17.8	-23.7	-42.2	1.22	1.64	-76.8	-100.8	-121.4	-141.4	1000.0	-143.07

\*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 [minicircuits.com](http://www.minicircuits.com) 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).