

Coaxial

# Voltage Controlled Oscillator

## ZX95-2705+

Wide Band 1950 to 2705 MHz

### Features

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

### Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Cable TV



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-2705-S+	\$49.95 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

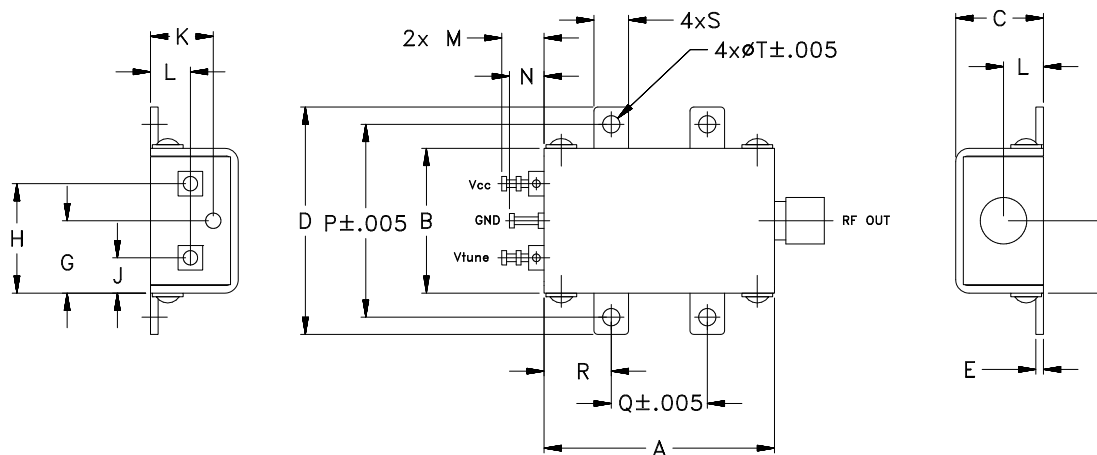
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-2705+	1950	2705	+8.5	-64	-90	-112	-132	0.5	10	91-156	20	340	-90	-27	-12	14	4	8.5	29

### 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)	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).

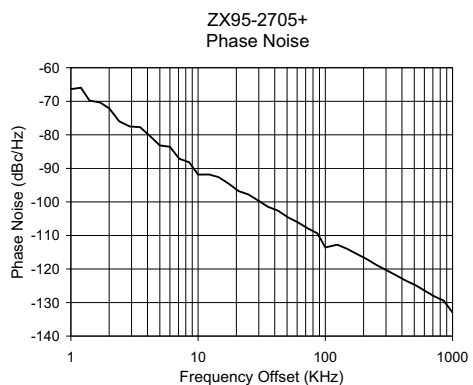
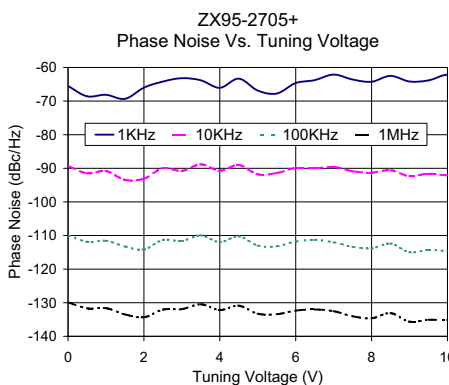
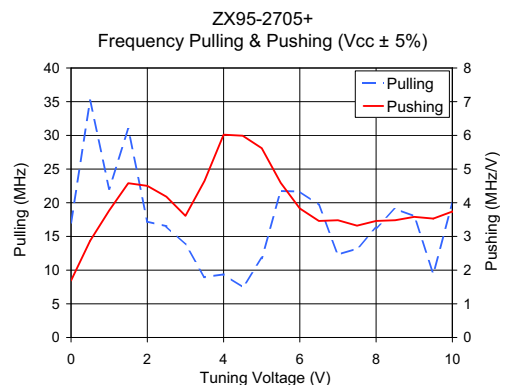
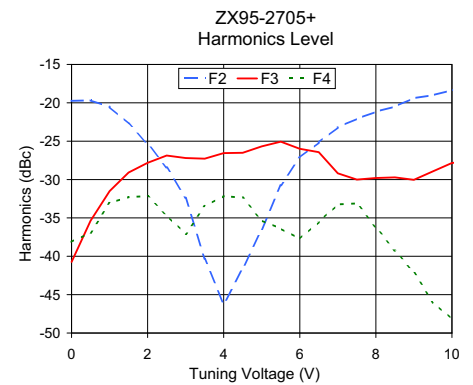
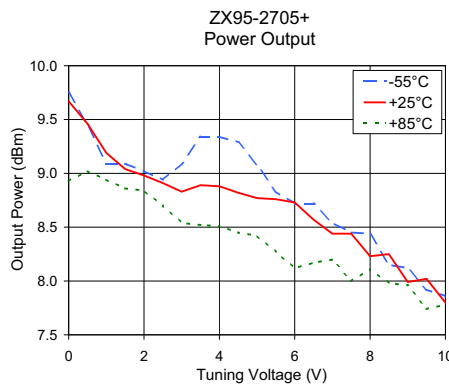
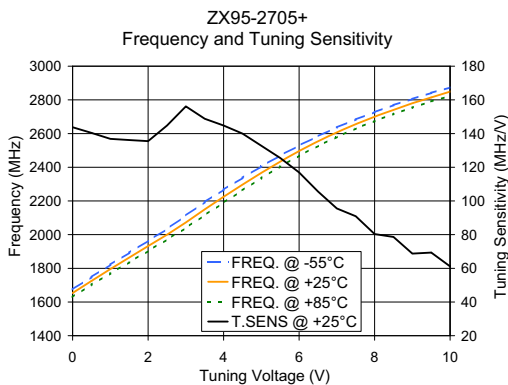
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EDR-7291MP  
ZX95-2705+  
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# Performance Data & Curves\*

# ZX95-2705+

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 2325 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	143.75	1674.9	1653.4	1630.3	9.75	9.67	8.93	22.69	-19.8	-40.7	-38.1	1.69	17.05	-65.5	-89.3	-109.9	-129.9	1.0	-66.39
1.00	136.86	1821.5	1795.5	1769.9	9.09	9.19	8.94	22.98	-20.5	-31.5	-33.1	3.77	22.07	-68.1	-90.8	-111.6	-131.6	2.0	-72.09
1.50	136.16	1893.0	1863.9	1836.7	9.09	9.04	8.86	23.15	-22.7	-29.1	-32.3	4.58	30.94	-69.4	-93.5	-113.3	-133.5	3.5	-77.71
2.00	135.50	1963.7	1932.0	1903.4	9.02	8.98	8.84	23.34	-25.4	-27.8	-32.2	4.50	17.20	-66.0	-93.1	-114.2	-134.3	6.0	-83.57
2.50	144.75	2033.2	1999.7	1971.1	8.94	8.91	8.70	23.48	-28.4	-26.9	-34.7	4.18	16.50	-64.2	-90.0	-111.3	-132.1	8.5	-88.17
3.00	156.15	2113.2	2072.1	2040.4	9.09	8.83	8.54	23.60	-32.4	-27.2	-37.1	3.61	13.78	-63.2	-90.8	-111.7	-131.9	10.0	-91.86
3.50	148.76	2193.3	2150.2	2115.5	9.34	8.89	8.52	23.82	-40.3	-27.3	-33.5	4.65	8.96	-63.8	-88.8	-110.0	-130.5	20.8	-96.77
4.00	144.76	2267.0	2224.6	2189.9	9.34	8.88	8.51	23.97	-46.2	-26.6	-32.2	6.02	9.38	-66.1	-90.7	-112.0	-132.2	35.5	-101.47
4.50	140.00	2337.6	2297.0	2263.3	9.29	8.82	8.45	24.07	-41.6	-26.5	-32.4	5.99	7.45	-63.3	-89.0	-110.3	-130.9	60.7	-106.08
5.00	132.73	2405.5	2367.0	2335.5	9.08	8.77	8.42	24.10	-36.5	-25.7	-35.3	5.62	11.77	-66.9	-91.8	-113.0	-133.3	86.7	-109.39
5.50	125.49	2469.8	2433.3	2404.6	8.83	8.76	8.27	24.11	-30.7	-25.1	-36.4	4.59	21.74	-67.8	-91.4	-113.2	-133.4	100.0	-113.58
6.00	116.90	2528.8	2496.1	2468.9	8.72	8.73	8.12	24.14	-27.1	-26.0	-37.7	3.83	21.67	-64.6	-89.9	-111.8	-132.4	148.1	-113.98
6.50	105.61	2583.9	2554.5	2526.8	8.72	8.57	8.17	24.15	-25.2	-26.4	-35.5	3.46	19.66	-63.8	-90.0	-111.3	-132.0	177.0	-115.52
7.00	95.52	2636.5	2607.3	2579.9	8.54	8.44	8.20	24.10	-23.2	-29.2	-33.2	3.48	12.29	-62.1	-89.6	-112.0	-132.5	211.6	-117.04
7.50	90.92	2683.8	2655.1	2630.0	8.45	8.44	8.00	24.11	-22.1	-30.0	-33.1	3.32	13.20	-63.6	-90.9	-113.3	-134.0	302.4	-120.37
8.00	80.32	2727.2	2700.5	2674.1	8.44	8.23	8.11	24.12	-21.2	-29.8	-36.2	3.46	16.27	-64.2	-91.3	-113.8	-134.7	361.5	-121.92
8.50	78.63	2768.7	2740.7	2716.3	8.15	8.25	7.98	24.10	-20.5	-29.7	-39.3	3.48	19.10	-62.5	-90.6	-112.4	-133.1	507.5	-124.74
9.00	68.75	2805.0	2780.0	2754.1	8.12	7.99	7.96	24.12	-19.4	-30.0	-42.1	3.58	18.01	-64.2	-92.4	-115.0	-135.7	606.7	-126.50
9.50	69.33	2841.6	2814.4	2790.6	7.92	8.02	7.74	24.10	-19.0	-28.9	-46.0	3.53	9.51	-63.8	-91.6	-114.3	-135.1	851.6	-129.42
10.00	61.16	2873.8	2849.1	2823.1	7.86	7.80	7.78	24.10	-18.4	-27.8	-48.2	3.74	19.92	-62.2	-92.1	-114.5	-135.2	1000.0	-133.00

\*at 25°C unless mentioned otherwise



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