

Coaxial

# Voltage Controlled Oscillator

## ZX95-3787C+

5V Tuning for PLL IC's 3726 to 3787 MHz

### Features

- Low phase noise
- Low pulling
- Low pushing
- Protected by US patent 6,790,049

### Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Industrial communications



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-3787C-S+	\$ 44.95 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

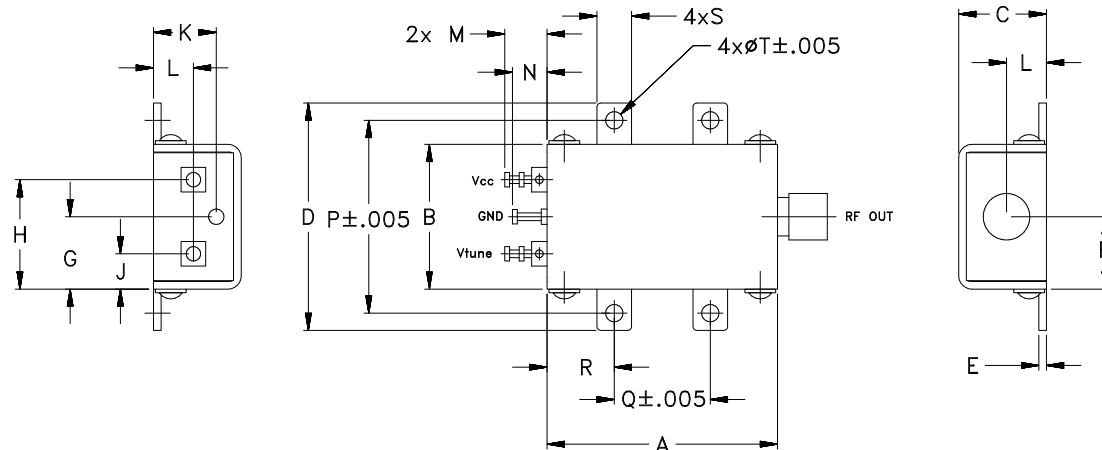
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER					
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Typ.	Max.	Typ.	Typ.	Vcc (volts)	Current (mA)
ZX95-3787C+	3726	3787	+1.5	-78	-104	-125	-147	0.5	4.5	35 - 55	15	80	-90	-16	-10	2.4	0.2	5	45			

### Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
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	.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)

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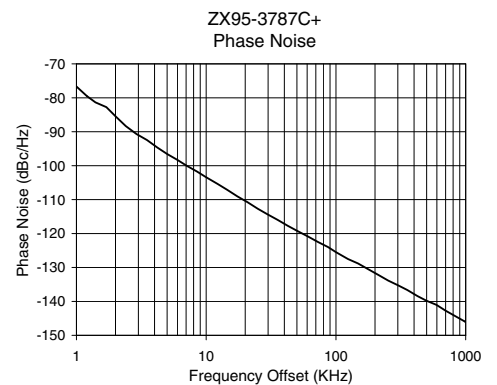
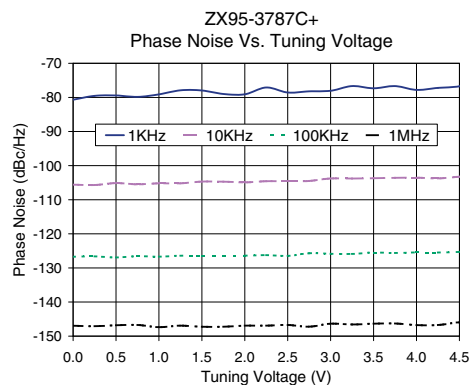
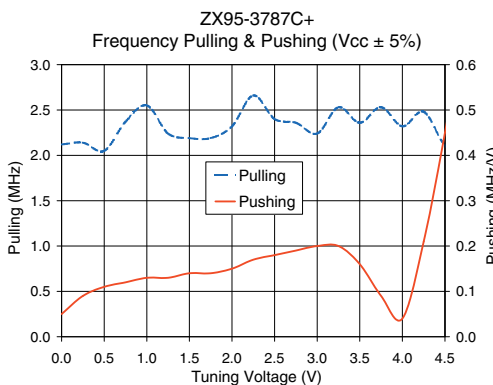
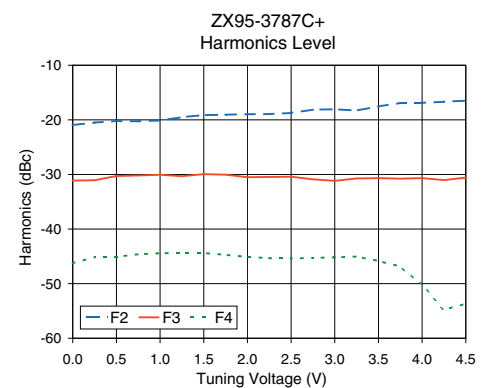
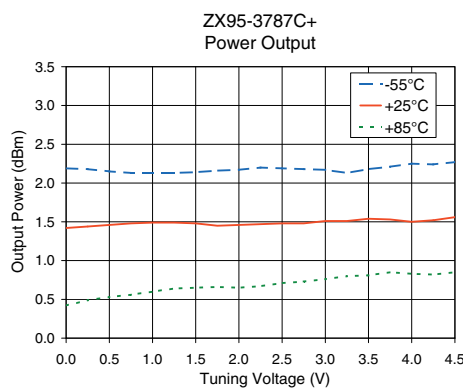
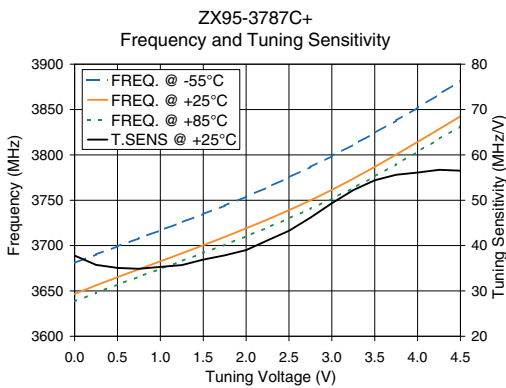
REV. OR  
M120937  
EDR-9268F2  
ZXR95-3787C+  
RAV  
090903  
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# Performance Data & Curves\*

# ZX95-3787C+

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 3756 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	37.79	3680.8	3646.7	3638.3	2.19	1.42	0.42	37.70	-20.9	-31.1	-46.3	0.05	2.12	-80.7	-105.6	-126.7	-146.9	1.0	-76.67
0.25	35.76	3690.2	3656.2	3647.9	2.18	1.44	0.49	37.71	-20.5	-31.1	-45.1	0.09	2.14	-79.5	-105.7	-126.6	-147.1	2.0	-85.45
0.50	35.07	3699.2	3665.1	3656.9	2.15	1.46	0.53	37.72	-20.2	-30.3	-45.1	0.11	2.05	-79.4	-105.1	-126.9	-146.8	3.5	-92.46
0.75	34.88	3708.1	3673.9	3665.6	2.13	1.48	0.56	37.73	-20.3	-30.2	-44.6	0.12	2.37	-79.9	-105.5	-126.6	-146.7	6.0	-98.31
1.00	35.30	3716.8	3682.6	3674.3	2.13	1.49	0.60	37.74	-20.1	-30.1	-44.4	0.13	2.55	-79.1	-105.2	-126.7	-147.4	8.5	-101.73
1.25	35.69	3725.7	3691.4	3683.0	2.13	1.49	0.64	37.75	-19.5	-30.3	-44.4	0.13	2.24	-77.9	-105.2	-126.4	-146.9	10.0	-103.42
1.50	36.90	3734.8	3700.3	3691.9	2.14	1.48	0.65	37.77	-19.1	-29.9	-44.4	0.14	2.19	-78.0	-104.7	-126.4	-147.3	20.8	-110.75
1.75	37.84	3744.0	3709.6	3700.9	2.16	1.45	0.66	37.78	-19.1	-30.1	-44.7	0.14	2.19	-79.0	-104.7	-126.4	-147.2	35.5	-115.97
2.00	39.00	3753.9	3719.0	3710.3	2.17	1.46	0.65	37.80	-19.0	-30.5	-45.1	0.15	2.32	-79.1	-104.9	-126.4	-146.9	60.7	-120.84
2.25	41.15	3764.2	3728.8	3719.9	2.20	1.47	0.67	37.81	-18.9	-30.5	-45.3	0.17	2.66	-77.1	-104.6	-126.2	-146.9	86.7	-123.96
2.50	43.26	3775.1	3739.1	3729.9	2.19	1.48	0.71	37.81	-18.7	-30.4	-45.4	0.18	2.40	-78.6	-104.6	-126.5	-146.7	100.0	-125.50
2.75	46.15	3786.7	3749.9	3740.5	2.18	1.48	0.73	37.82	-18.1	-30.9	-45.3	0.19	2.36	-78.2	-104.5	-125.7	-147.2	148.1	-128.83
3.00	49.33	3798.6	3761.4	3751.6	2.17	1.51	0.76	37.82	-18.1	-31.2	-45.2	0.20	2.24	-78.1	-103.8	-125.8	-146.3	211.6	-132.16
3.25	52.23	3811.2	3773.8	3763.5	2.13	1.51	0.80	37.83	-18.3	-30.7	-45.0	0.20	2.53	-76.7	-103.8	-125.9	-146.6	355.1	-136.66
3.50	54.40	3824.2	3786.8	3776.3	2.18	1.54	0.81	37.85	-17.5	-30.7	-45.9	0.16	2.36	-77.3	-103.7	-125.5	-146.4	424.5	-138.43
3.75	55.61	3837.8	3800.4	3789.7	2.21	1.53	0.85	37.88	-16.9	-30.8	-46.9	0.09	2.53	-76.7	-103.6	-125.6	-146.3	498.5	-139.81
4.00	56.10	3852.1	3814.3	3803.6	2.25	1.50	0.83	37.91	-16.9	-30.7	-50.3	0.04	2.32	-77.8	-103.5	-125.5	-146.8	595.9	-141.03
4.25	56.70	3866.7	3828.3	3817.6	2.24	1.52	0.82	37.92	-16.7	-31.0	-54.8	0.21	2.48	-77.2	-103.7	-125.5	-146.7	982.3	-145.91
4.50	56.52	3881.5	3842.5	3831.6	2.27	1.56	0.85	37.93	-16.5	-30.6	-53.7	0.45	2.11	-76.8	-103.3	-125.3	-146.0	1000.0	-146.04

\*at 25°C unless mentioned otherwise



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