

Coaxial

Voltage Controlled Oscillator

ZX95-3800A+

Wide Band 1900 to 3700 MHz

Features

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



CASE STYLE: GB956

Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Point-to-Point systems

Connectors	Model	Price	Qty.
SMA	ZX95-3800A-S+	\$ 41.95 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

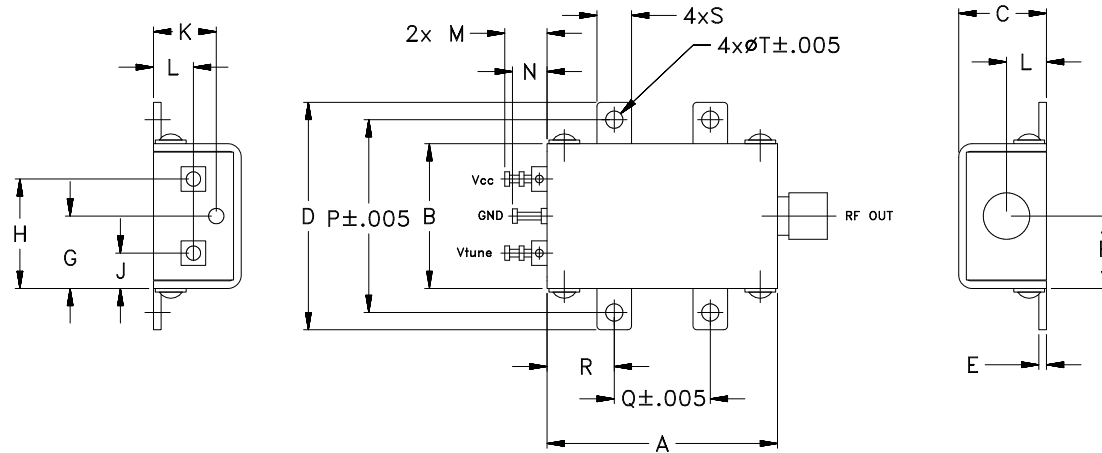
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-3800A+	1900	3700	+5	-65	-89	-110	-130	0.5	20	60-150	50	70	-90	-22	-10	2	4.5	6	55

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)	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	.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



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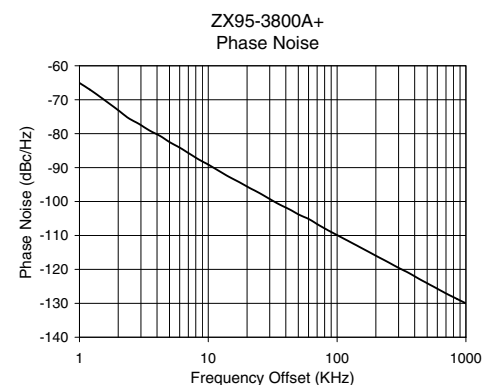
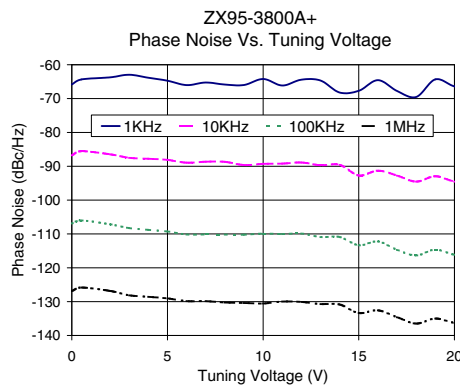
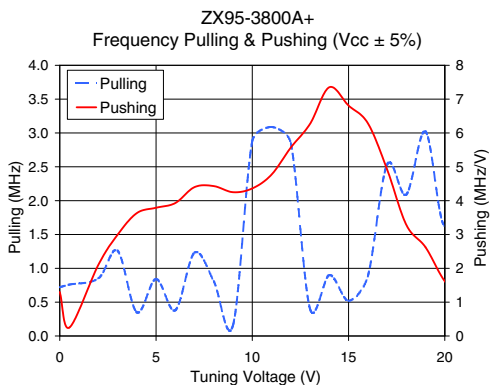
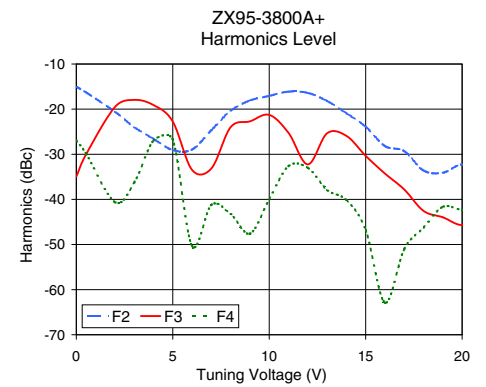
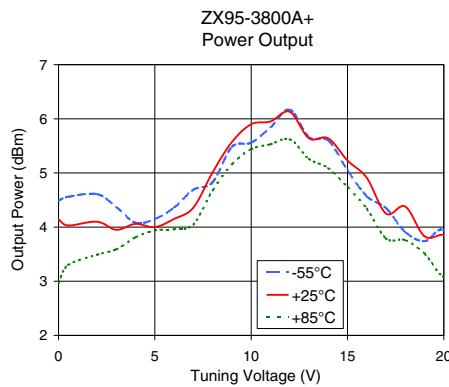
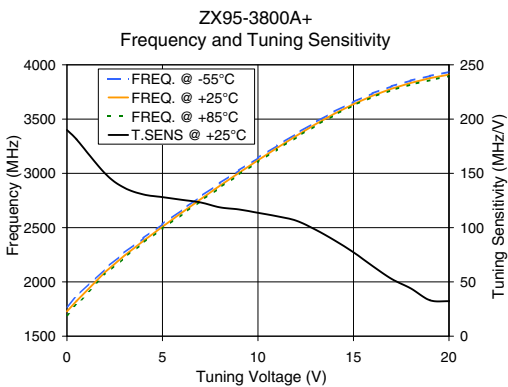
REV. OR
M120402
EDR-8194/12MPF2
ZX95-3800A+
RAV
091122
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Performance Data & Curves*

ZX95-3800A+

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 2800 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	189.89	1773.4	1728.6	1694.5	4.49	4.14	2.97	45.57	-15.0	-35.0	-26.9	1.30	0.72	-65.8	-86.8	-106.9	-126.9	1.0	-65.06
0.50	181.35	1865.4	1823.6	1791.2	4.56	4.03	3.30	45.58	-16.3	-30.1	-29.8	0.25	0.76	-64.4	-85.5	-106.0	-125.9	2.0	-73.10
2.00	149.82	2121.5	2091.3	2068.1	4.61	4.10	3.49	45.83	-20.6	-19.5	-40.6	2.10	0.85	-63.7	-86.5	-107.2	-126.8	3.5	-79.07
3.00	136.80	2267.9	2241.1	2222.1	4.37	3.95	3.59	46.08	-24.0	-18.0	-36.3	2.99	1.26	-63.0	-87.5	-108.3	-128.1	6.0	-84.11
4.00	130.57	2402.9	2377.9	2360.4	4.08	4.06	3.81	46.23	-26.6	-19.1	-27.0	3.63	0.35	-63.8	-87.8	-108.8	-128.6	8.5	-87.69
5.00	128.11	2532.7	2508.5	2491.5	4.15	4.00	3.94	46.40	-29.1	-22.8	-26.7	3.79	0.84	-64.7	-88.1	-109.3	-129.0	10.0	-89.12
6.00	125.63	2661.2	2636.6	2619.4	4.36	4.15	3.96	46.48	-29.0	-33.5	-50.3	3.93	0.38	-66.0	-89.0	-110.2	-129.8	20.8	-95.95
7.00	123.22	2786.9	2762.2	2745.0	4.69	4.36	4.05	46.50	-24.7	-33.1	-41.2	4.40	1.23	-65.3	-88.7	-110.2	-129.9	35.5	-100.82
8.00	118.70	2909.2	2885.5	2867.7	4.83	5.01	4.68	46.48	-20.4	-24.0	-43.2	4.43	0.81	-65.9	-88.7	-110.2	-130.3	60.7	-105.23
9.00	116.77	3027.0	3004.2	2987.9	5.48	5.57	5.16	46.50	-18.1	-22.7	-47.6	4.25	0.16	-66.0	-89.6	-110.2	-130.4	86.7	-108.65
10.00	113.65	3142.2	3120.9	3104.8	5.56	5.90	5.44	46.29	-17.1	-21.3	-40.0	4.36	2.88	-64.2	-89.3	-109.9	-130.6	100.0	-109.90
11.00	110.48	3255.1	3234.6	3220.1	5.84	5.95	5.53	46.15	-16.1	-25.3	-32.6	4.77	3.09	-66.1	-89.2	-110.0	-130.0	148.1	-113.33
12.00	106.45	3365.4	3345.1	3331.5	6.17	6.13	5.62	45.91	-16.4	-32.3	-33.0	5.57	2.85	-64.4	-88.9	-109.9	-130.1	177.0	-114.89
13.00	98.24	3470.1	3451.5	3437.7	5.66	5.64	5.26	45.62	-18.2	-25.4	-37.9	6.27	0.40	-64.7	-89.7	-110.9	-130.7	211.6	-116.49
14.00	88.34	3568.9	3549.8	3536.7	5.60	5.64	5.09	45.37	-20.9	-25.9	-40.2	7.35	0.90	-68.2	-89.6	-110.9	-130.8	302.4	-119.62
15.00	77.29	3658.0	3638.1	3626.7	5.05	5.23	4.74	45.19	-23.9	-30.4	-46.8	6.81	0.52	-67.7	-92.7	-113.4	-133.4	361.5	-121.09
16.00	64.66	3736.8	3715.4	3703.6	4.57	4.91	4.34	45.03	-28.2	-34.3	-62.9	6.29	0.88	-64.6	-91.3	-112.2	-132.6	507.5	-124.21
17.00	52.67	3802.4	3780.0	3766.3	4.35	4.25	3.79	44.94	-29.3	-37.8	-51.0	4.93	2.53	-67.7	-92.7	-114.7	-134.6	606.7	-125.81
18.00	44.03	3854.8	3832.7	3817.8	3.91	4.38	3.76	44.86	-33.6	-42.6	-46.3	3.29	2.09	-69.5	-94.5	-116.4	-136.5	851.6	-128.71
20.00	32.21	3934.5	3909.9	3896.2	3.94	3.86	3.08	44.77	-32.3	-45.7	-42.3	1.62	1.63	-66.4	-94.5	-116.1	-136.3	1000.0	-130.02

*at 25°C unless mentioned otherwise



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