

Coaxial

# Voltage Controlled Oscillator

## ZX95-850W+

Wide Band 400 to 850 MHz

### Features

- High power output, +10dBm typ.
- Low phase noise
- Low pushing
- Protected by US patent 6,790,049

### Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- Point-to-multipoint
- Digital video broadcasting - terrestrial



CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-850W-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

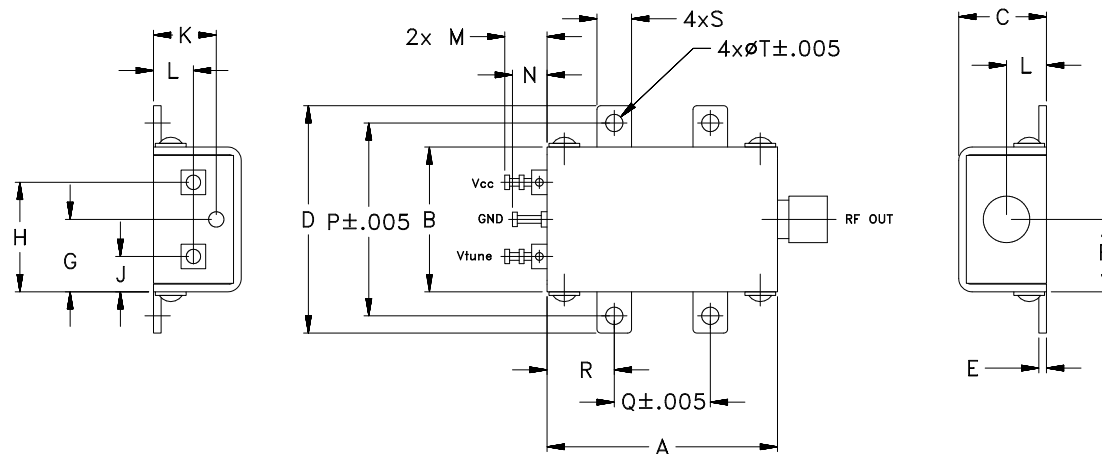
MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Typ.	Typ.
ZX95-850W+	400	850	+10	-71	-98	-119	-140	1	25	18 - 32	320	13	-90	-22	-12	4	0.3	5	27

### 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)	27V
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

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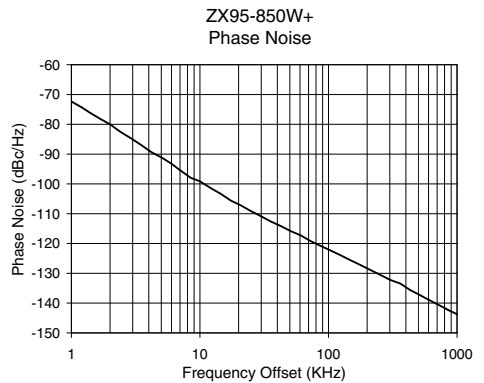
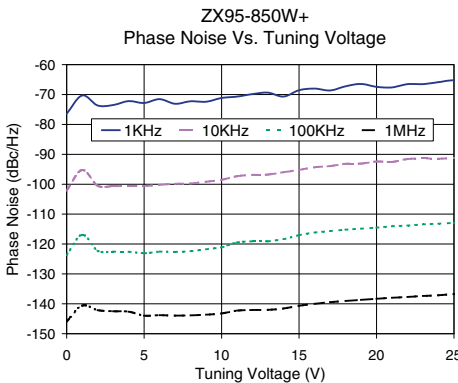
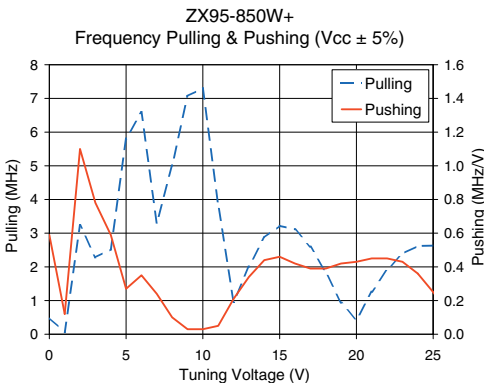
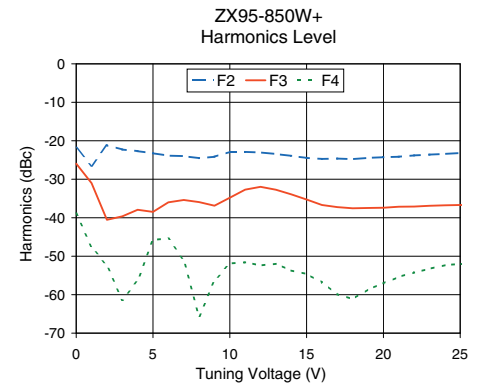
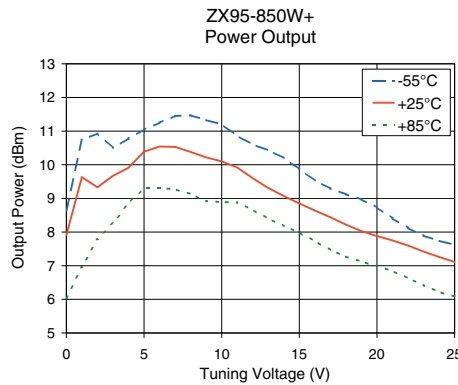
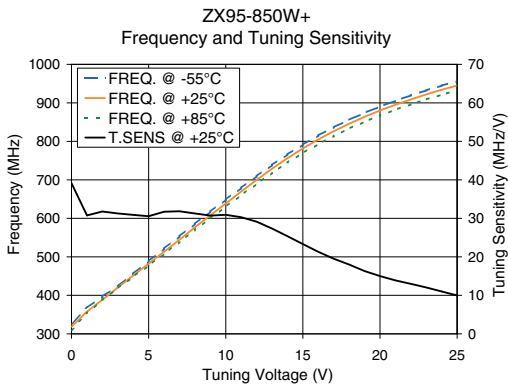
REV. OR  
M114715  
EDR-8225F2  
ZX95-850W+  
RAV  
090907  
Page 1 of 2

# Performance Data & Curves\*

# ZX95-850W+

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 595 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	39.13	326.8	318.6	310.6	8.64	7.91	6.04	20.83	-21.8	-25.9	-38.9	0.59	0.49	-76.4	-102.1	-123.7	-145.9	1.0	-72.34
1.00	30.77	367.5	357.7	352.5	10.74	9.63	6.96	20.80	-26.4	-31.0	-47.6	0.12	0.06	-70.3	-95.2	-116.9	-140.6	2.0	-79.99
2.00	31.78	397.1	388.5	387.8	10.93	9.33	7.79	20.51	-21.2	-40.5	-52.4	1.10	3.24	-73.7	-100.5	-122.3	-142.1	3.5	-86.99
3.00	31.27	423.6	420.3	418.5	10.50	9.67	8.26	20.50	-22.3	-39.6	-61.4	0.78	2.28	-73.5	-100.6	-122.5	-142.5	6.0	-93.21
4.00	30.90	456.1	451.5	448.3	10.78	9.91	8.85	20.50	-22.7	-37.9	-56.4	0.59	2.52	-72.2	-100.6	-122.6	-142.6	8.5	-97.98
5.00	30.55	488.6	482.5	477.4	11.04	10.39	9.31	20.52	-23.2	-38.5	-45.7	0.27	5.81	-72.8	-100.6	-123.1	-144.0	10.0	-99.14
8.00	31.28	585.7	576.6	569.7	11.47	10.38	9.13	20.53	-24.5	-35.9	-65.7	0.10	5.01	-72.3	-99.8	-122.4	-143.9	20.8	-107.20
9.00	30.71	617.7	607.8	600.2	11.33	10.22	8.92	20.52	-24.1	-36.9	-56.3	0.03	7.07	-72.4	-99.2	-121.8	-143.6	35.5	-112.61
10.00	30.92	648.6	638.6	630.5	11.20	10.10	8.89	20.48	-22.9	-34.8	-51.9	0.03	7.30	-71.2	-98.5	-121.1	-143.2	60.7	-117.23
12.00	29.13	709.5	699.8	689.5	10.60	9.60	8.66	20.45	-23.0	-32.0	-52.4	0.21	0.96	-69.9	-96.9	-119.1	-142.1	86.7	-120.81
13.00	27.36	738.5	728.9	718.0	10.43	9.31	8.40	20.46	-23.4	-32.7	-52.0	0.34	2.01	-69.4	-96.8	-119.1	-142.0	100.0	-122.01
14.00	25.35	765.9	756.3	745.0	10.20	9.07	8.18	20.46	-23.9	-33.9	-53.7	0.44	2.87	-70.7	-96.0	-118.4	-141.6	148.1	-125.61
15.00	23.33	791.4	781.6	769.9	9.87	8.85	7.98	20.44	-24.5	-35.3	-54.6	0.46	3.22	-68.6	-95.2	-117.1	-140.6	177.0	-127.19
16.00	21.30	815.0	804.9	792.7	9.53	8.64	7.73	20.43	-24.7	-36.7	-56.8	0.42	3.11	-68.0	-94.3	-116.2	-140.0	211.6	-128.88
17.00	19.51	836.6	826.2	813.9	9.29	8.44	7.47	20.41	-24.6	-37.2	-59.9	0.39	2.60	-68.7	-93.9	-115.7	-139.4	302.4	-132.22
18.00	18.00	856.1	845.7	833.2	9.12	8.22	7.27	20.38	-24.8	-37.6	-61.2	0.39	1.84	-67.3	-93.2	-115.2	-139.1	361.5	-133.43
19.00	16.32	873.8	863.7	850.9	8.97	8.03	7.12	20.35	-24.4	-37.5	-58.6	0.42	0.94	-66.5	-93.1	-114.9	-138.7	507.5	-137.18
21.00	13.88	905.4	895.1	882.2	8.41	7.75	6.84	20.30	-24.1	-37.1	-55.4	0.45	1.26	-67.6	-92.6	-114.1	-138.0	606.7	-138.96
23.00	12.04	932.5	921.9	909.0	7.89	7.42	6.42	20.24	-23.6	-36.9	-53.3	0.43	2.39	-66.5	-91.4	-113.4	-137.4	851.6	-142.30
25.00	9.96	956.0	945.0	932.2	7.62	7.11	6.08	20.19	-23.2	-36.7	-52.0	0.25	2.63	-65.2	-91.2	-112.9	-136.8	1000.0	-143.73

\*at 25°C unless mentioned otherwise



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