

Coaxial

Voltage Controlled Oscillator

ZX95-1700W+

Wide Band 770 to 1700 MHz

Features

- very wide bandwidth 770 to 1700 MHz
- high power output, +9 dBm typ.
- low phase noise, -141 dBc/Hz typ. at 1 MHz
- protected by US patent 6,790,049

Applications

- r & d
- lab
- instrumentation
- test equipment



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-1700W-S+

+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 dBr (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-1700W+	770	1700	+9	-72	-99	-120	-141	1	24	26-65	70	50	-90	-25	-9	7	0.7	12	35

Maximum Ratings

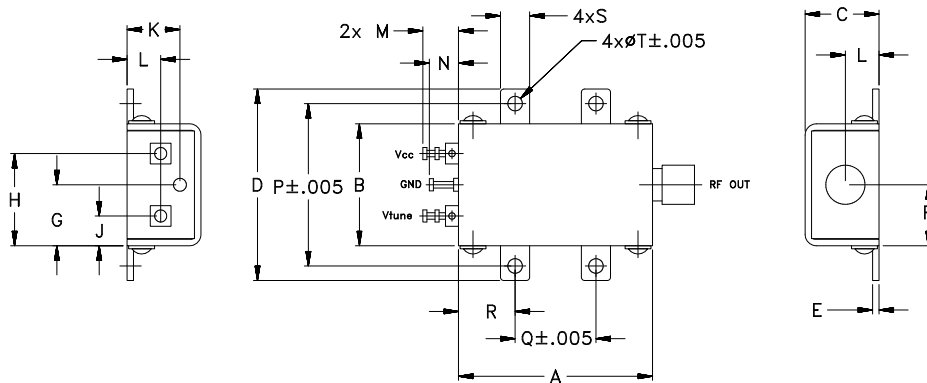
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	14.5V
Absolute Max. Tuning Voltage (Vtune)	30.0V
All specifications	50 ohm system

Permanent damage may occur if any of these limits are exceeded.



NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminals. See Application Note [AN-40-10](#).

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

Notes

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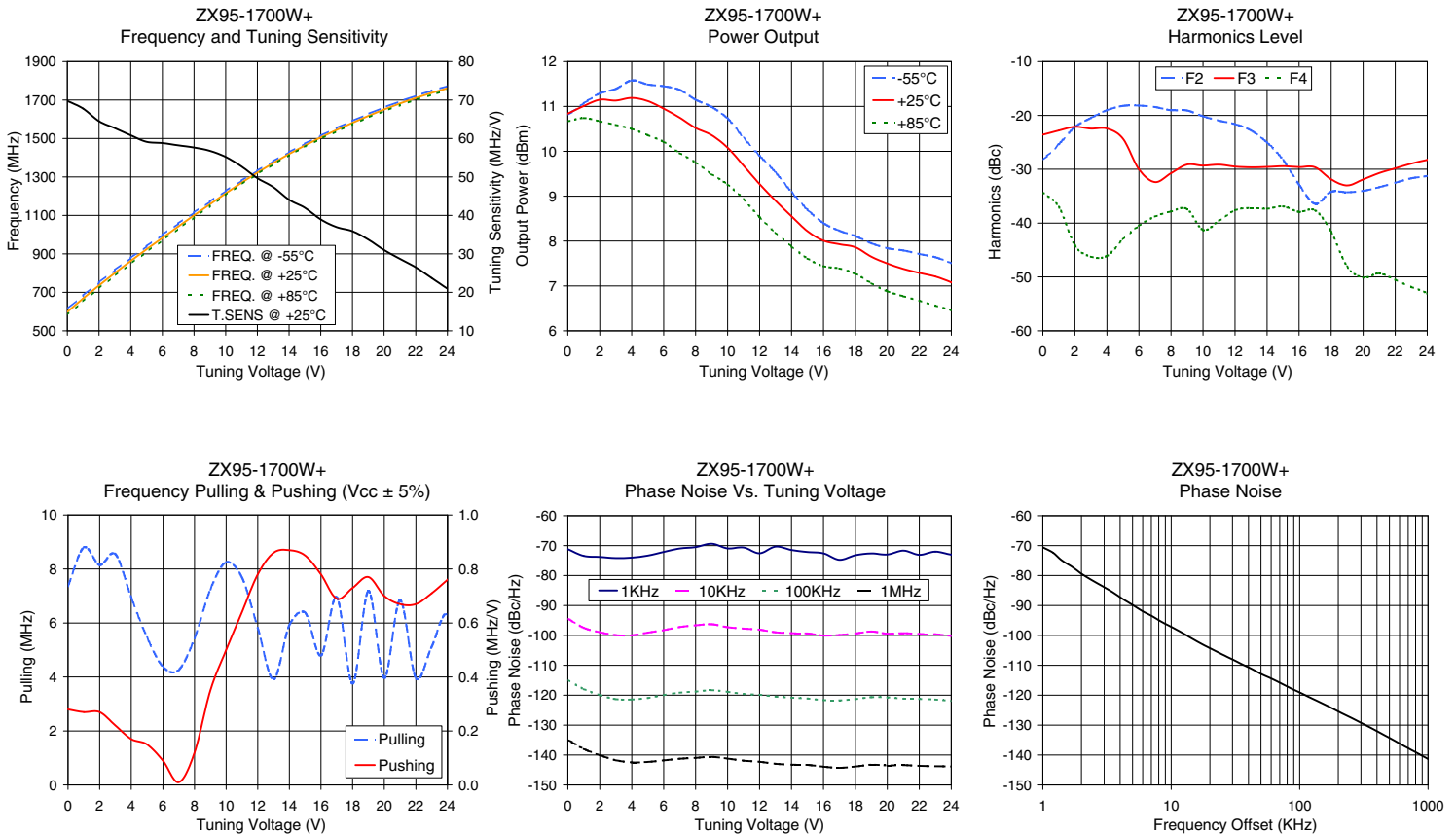
REV. E
M152326
EDR-10526MPF1
ZX95-1700W+
RAV
151016
Page 1 of 2

Performance Data & Curves*

ZX95-1700W+

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 1235 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	69.78	613.4	598.5	582.7	10.81	10.84	10.67	27.24	-28.3	-23.6	-34.3	0.28	7.36	-71.2	-94.4	-114.9	-134.9	1.0	-70.57
1.00	67.78	683.1	668.3	653.1	11.07	11.01	10.74	27.31	-25.3	-22.8	-37.0	0.27	8.80	-73.4	-97.5	-118.0	-138.0	2.0	-79.38
2.00	64.49	750.9	736.1	720.9	11.29	11.15	10.67	27.39	-22.2	-22.1	-44.1	0.27	8.15	-73.8	-98.9	-120.0	-140.1	3.5	-85.57
3.00	62.68	815.7	800.6	785.8	11.39	11.13	10.59	27.47	-20.5	-22.5	-46.2	0.22	8.55	-74.2	-99.9	-121.3	-141.7	6.0	-91.93
4.00	60.83	878.6	863.2	848.8	11.58	11.19	10.50	27.57	-19.0	-22.4	-46.1	0.17	6.95	-74.0	-100.0	-121.5	-142.5	8.5	-95.59
6.00	58.80	998.8	983.2	970.1	11.45	10.95	10.21	27.75	-18.2	-30.0	-40.5	0.09	4.38	-72.1	-98.3	-120.0	-141.8	10.0	-97.15
8.00	57.65	1115.0	1100.2	1088.9	11.15	10.52	9.75	27.82	-19.0	-30.7	-37.8	0.12	5.43	-70.5	-96.6	-118.8	-141.0	20.8	-104.64
9.00	56.77	1171.7	1157.9	1147.8	10.99	10.36	9.49	27.80	-19.1	-29.1	-37.4	0.35	7.24	-69.4	-96.3	-118.3	-140.6	35.5	-109.63
10.00	55.20	1226.7	1214.6	1205.9	10.73	10.08	9.26	27.80	-20.2	-29.3	-41.3	0.50	8.25	-70.9	-97.3	-118.9	-141.2	60.7	-114.51
11.00	52.71	1280.7	1269.8	1262.0	10.30	9.68	8.93	27.77	-21.0	-29.1	-39.6	0.64	7.69	-70.6	-97.7	-119.6	-141.9	86.7	-117.83
12.00	49.67	1332.6	1322.6	1315.3	9.90	9.27	8.53	27.72	-21.6	-29.5	-37.6	0.78	5.82	-72.5	-98.1	-119.9	-142.3	100.0	-119.08
13.00	47.37	1381.4	1372.2	1365.4	9.53	8.90	8.19	27.68	-22.8	-29.6	-37.2	0.86	3.91	-70.3	-99.0	-120.5	-142.9	148.1	-122.62
14.00	44.06	1428.4	1419.6	1412.8	9.09	8.55	7.88	27.64	-25.0	-29.6	-37.3	0.87	5.92	-71.5	-99.3	-120.8	-143.2	177.0	-124.27
15.00	41.98	1472.5	1463.7	1456.7	8.70	8.22	7.61	27.62	-28.3	-29.4	-36.9	0.85	6.38	-72.1	-99.3	-121.1	-143.3	211.6	-125.97
16.00	38.94	1514.7	1505.6	1498.2	8.40	8.01	7.44	27.61	-32.9	-29.6	-37.9	0.78	4.80	-72.6	-100.1	-121.7	-143.9	302.4	-129.29
18.00	35.89	1591.0	1581.5	1573.7	8.11	7.86	7.27	27.61	-34.2	-31.9	-41.6	0.73	3.76	-73.2	-99.4	-121.3	-143.9	361.5	-131.00
20.00	30.98	1661.7	1651.1	1642.4	7.84	7.50	6.88	27.58	-34.0	-31.9	-50.1	0.70	3.97	-73.0	-99.5	-120.7	-143.5	507.5	-134.41
21.00	28.70	1693.0	1682.1	1673.0	7.79	7.38	6.77	27.57	-33.3	-30.7	-49.3	0.67	6.84	-71.7	-99.2	-121.2	-143.4	606.7	-136.26
22.00	26.49	1721.9	1710.8	1701.5	7.71	7.29	6.67	27.57	-32.5	-29.8	-50.5	0.67	3.96	-73.1	-99.5	-121.3	-143.6	851.6	-139.70
24.00	20.96	1772.2	1761.0	1751.4	7.51	7.08	6.46	27.56	-31.3	-28.3	-53.1	0.76	6.31	-73.0	-100.2	-121.9	-143.8	1000.0	-141.33

*at 25°C unless mentioned otherwise



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