

Coaxial

Voltage Controlled Oscillator

ZX95-1700+

5V Tuning for PLL IC's 1690 to 1740 MHz

Features

- linear tuning characteristics
- low phase noise
- low pulling
- low pushing
- protected by US patent 6,790,049



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communications
- cellular infrastructure

Connectors	Model
SMA	ZX95-1700-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 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER			
	Min.	Max.		Typ.				VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Typ.		Typ.	Max.			Typ.	Max.	Vcc (volts)	Current (mA)
				1	10	100	1000														
ZX95-1700+	1690	1740	+1	-85	-110	-130	-150	0.5	5	25	17	100	-90	-20	-10	0.5	0.15	5	40		

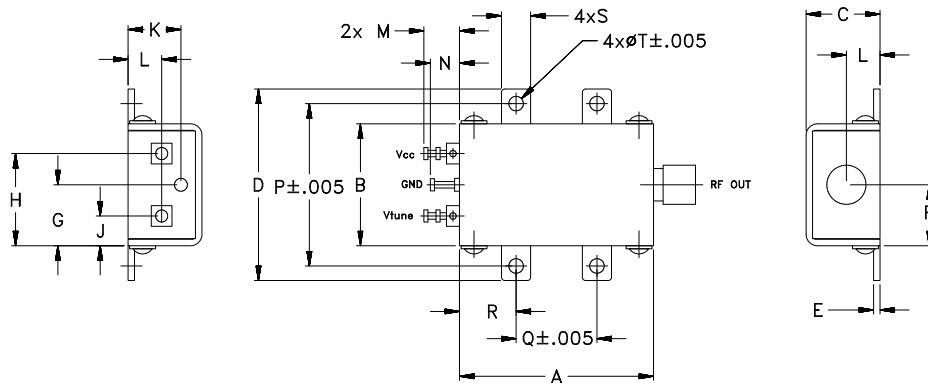
Maximum Ratings

Operating Temperature -55°C to 85°C
 Storage Temperature -55°C to 100°C
 Absolute Max. Supply Voltage (Vcc) 6.5V
 Absolute Max. Tuning Voltage (Vtune) 7.0V
 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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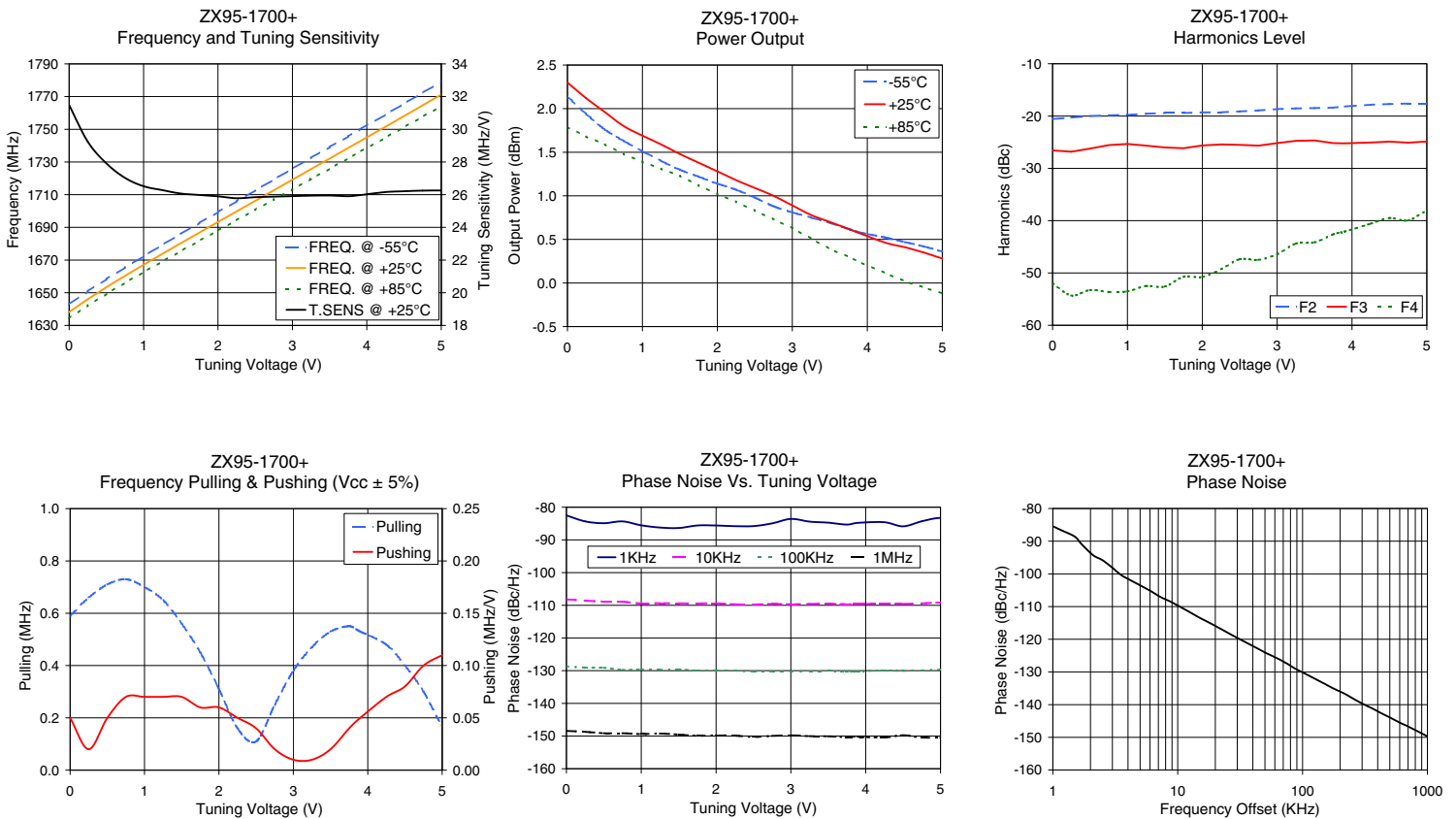
REV. B
 M152326
 EDR-10632MPF2
 ZX95-1700+
 RAV
 150923
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Performance Data & Curves*

ZX95-1700+

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 1715 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1KHz	10KHz	100KHz	1MHz		
0.00	31.48	1642.9	1638.1	1634.4	2.14	2.30	1.79	32.03	-20.6	-26.6	-52.0	0.05	0.59	-82.5	-108.2	-128.7	-148.4	1.0	-85.43
0.50	27.91	1658.3	1653.3	1649.3	1.76	1.96	1.59	32.12	-20.0	-26.2	-53.3	0.05	0.71	-84.9	-108.9	-129.1	-149.1	2.1	-94.27
0.75	27.03	1665.4	1660.3	1656.1	1.63	1.80	1.48	32.15	-19.9	-25.6	-53.6	0.07	0.73	-84.3	-108.9	-129.7	-149.1	3.5	-100.26
1.00	26.52	1672.4	1667.1	1662.7	1.51	1.69	1.39	32.19	-19.8	-25.3	-53.5	0.07	0.70	-85.5	-109.5	-129.6	-149.4	6.1	-105.31
1.25	26.28	1679.2	1673.7	1669.1	1.40	1.59	1.31	32.22	-19.6	-25.7	-52.5	0.07	0.65	-86.2	-109.4	-129.7	-149.2	8.7	-108.45
1.50	26.07	1686.0	1680.3	1675.4	1.30	1.48	1.23	32.26	-19.4	-26.0	-52.6	0.07	0.56	-86.4	-109.4	-129.6	-149.6	10.0	-109.69
1.75	25.98	1692.7	1686.8	1681.8	1.22	1.38	1.12	32.31	-19.4	-26.2	-50.7	0.06	0.45	-85.6	-109.4	-130.0	-149.9	21.1	-116.42
2.00	25.90	1699.4	1693.3	1688.1	1.14	1.28	1.02	32.35	-19.3	-25.6	-50.8	0.06	0.31	-85.6	-109.4	-129.9	-149.8	36.1	-121.19
2.25	25.78	1706.0	1699.8	1694.4	1.07	1.18	0.93	32.40	-19.3	-25.4	-49.3	0.05	0.16	-85.8	-109.7	-130.0	-149.9	61.6	-125.68
2.50	25.85	1712.6	1706.2	1700.7	0.98	1.09	0.83	32.44	-19.1	-25.5	-47.4	0.04	0.11	-85.8	-109.8	-130.2	-150.3	88.0	-129.06
2.75	25.88	1719.2	1712.7	1707.0	0.88	1.00	0.73	32.49	-18.9	-25.7	-47.5	0.02	0.25	-84.9	-109.6	-130.2	-150.0	100.0	-130.12
3.00	25.91	1725.9	1719.1	1713.3	0.81	0.89	0.63	32.53	-18.7	-25.2	-46.4	0.01	0.38	-83.6	-109.7	-130.2	-149.8	150.3	-133.64
3.25	25.94	1732.5	1725.6	1719.6	0.75	0.78	0.51	32.58	-18.5	-24.7	-44.4	0.01	0.47	-84.4	-109.6	-130.1	-150.0	179.6	-135.20
3.50	25.95	1739.1	1732.1	1725.9	0.69	0.70	0.39	32.63	-18.5	-24.7	-44.1	0.02	0.53	-84.7	-109.5	-130.1	-150.1	214.7	-136.56
3.75	25.91	1745.7	1738.6	1732.3	0.62	0.62	0.30	32.68	-18.4	-25.2	-42.6	0.04	0.55	-85.3	-109.7	-130.1	-150.3	306.7	-139.86
3.90	25.97	1749.7	1742.5	1736.1	0.58	0.57	0.24	32.70	-18.2	-25.2	-42.1	0.05	0.53	-84.8	-109.6	-130.2	-150.3	360.2	-141.14
4.25	26.16	1759.0	1751.6	1744.9	0.52	0.46	0.11	32.76	-17.8	-25.1	-40.6	0.07	0.48	-84.6	-109.5	-130.0	-150.4	505.5	-144.01
4.50	26.21	1765.7	1758.1	1751.3	0.47	0.41	0.02	32.81	-17.7	-24.9	-39.5	0.08	0.40	-85.8	-109.6	-130.1	-149.8	604.2	-145.55
4.75	26.25	1772.3	1764.6	1757.7	0.42	0.35	-0.05	32.86	-17.6	-25.1	-40.0	0.10	0.30	-84.3	-109.4	-129.9	-150.5	995.8	-149.67
5.00	26.25	1779.0	1771.2	1764.1	0.36	0.28	-0.12	32.90	-17.6	-24.9	-38.1	0.11	0.17	-83.3	-109.2	-129.7	-150.5	1000.0	-149.71

*at 25°C unless mentioned otherwise



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