

Coaxial

Voltage Controlled Oscillator

ZX95-1845+

Linear Tuning 1730 to 1830 MHz

Features

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



CASE STYLE: GB956

Applications

- r & d
- lab
- instrumentation
- wireless communications
- point-to-point

Connectors	Model
SMA	ZX95-1845-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.	Vcc (volts)	Current (mA)
				1	10	100	1000													
ZX95-1845+	1730	1830	+1	-81	-104	-125	-145	0.5	12	15	15	35	-90	-24	-14	1.4	0.3	8	35	

Maximum Ratings

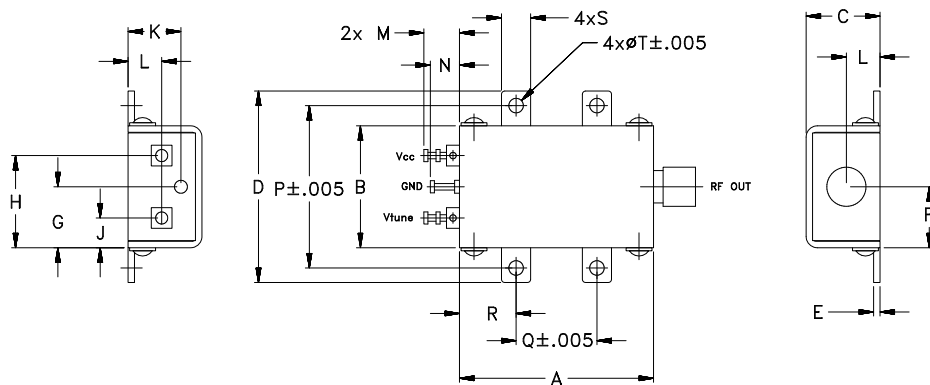
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	10V
Absolute Max. Tuning Voltage (Vtune)	14V
All specifications	50 ohm system

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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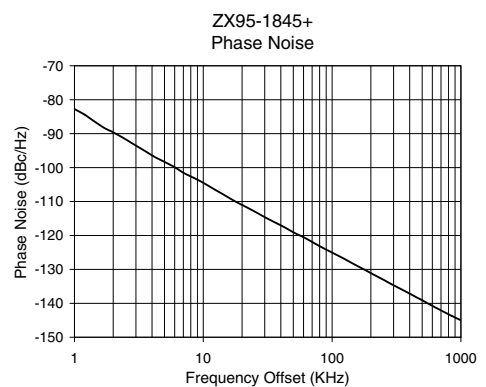
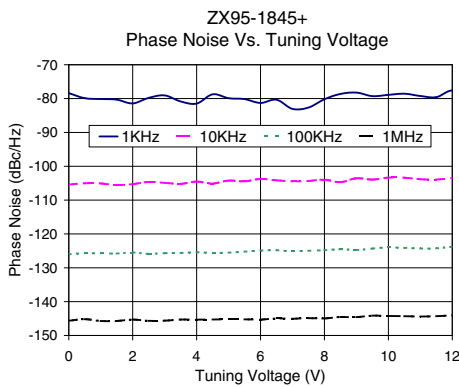
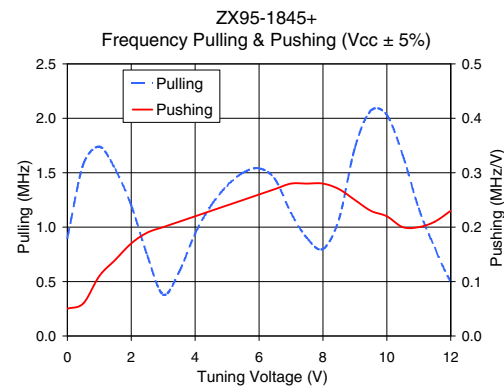
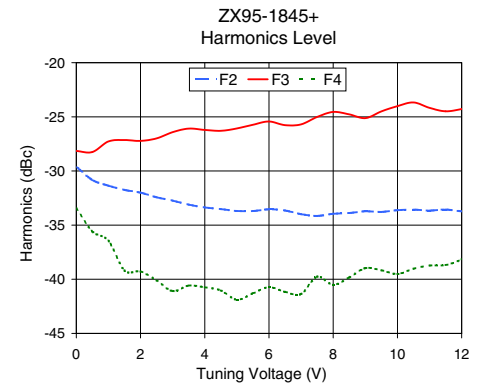
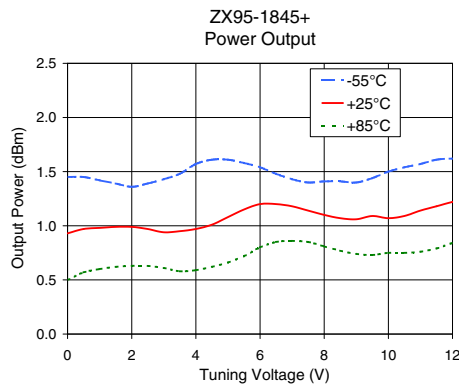
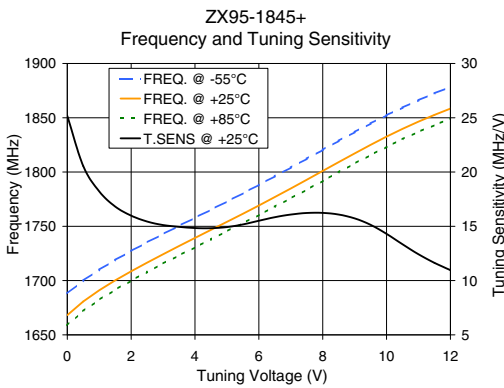
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Page 1 of 2

Performance Data & Curves*

ZX95-1845+

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 1788 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	25.18	1688.1	1668.2	1658.8	1.45	0.93	0.50	24.80	-29.6	-28.2	-33.5	0.05	0.90	-78.4	-105.4	-126.0	-145.6	1.0	-82.74
0.50	20.55	1700.0	1680.8	1671.9	1.45	0.97	0.57	24.82	-30.8	-28.3	-35.6	0.06	1.58	-79.9	-105.0	-125.7	-145.2	2.0	-89.62
1.00	18.22	1709.9	1691.0	1682.3	1.42	0.98	0.60	24.83	-31.4	-27.3	-36.4	0.11	1.74	-80.1	-105.1	-125.8	-145.7	3.5	-95.05
2.00	15.98	1727.2	1708.5	1699.9	1.36	0.99	0.63	24.87	-32.0	-27.2	-39.3	0.17	1.20	-81.4	-105.3	-125.5	-145.3	6.0	-99.89
3.00	15.12	1742.9	1724.3	1715.6	1.43	0.94	0.61	24.90	-32.7	-26.4	-41.1	0.20	0.38	-79.1	-104.9	-125.7	-145.6	8.5	-103.10
3.50	14.95	1750.4	1731.8	1723.2	1.48	0.95	0.58	24.92	-33.1	-26.1	-40.6	0.21	0.59	-80.8	-105.2	-125.6	-145.3	10.0	-104.47
4.00	14.84	1757.8	1739.3	1730.6	1.57	0.97	0.59	24.93	-33.4	-26.2	-40.7	0.22	0.94	-81.5	-104.6	-125.4	-145.3	20.8	-111.33
4.50	14.83	1765.3	1746.7	1738.0	1.61	1.01	0.62	24.94	-33.5	-26.3	-41.0	0.23	1.20	-78.8	-105.1	-125.6	-145.3	35.5	-116.06
5.00	14.92	1772.8	1754.1	1745.4	1.61	1.08	0.66	24.96	-33.7	-26.1	-41.9	0.24	1.38	-79.9	-104.3	-125.5	-145.2	60.7	-120.62
5.50	15.17	1780.5	1761.6	1752.9	1.58	1.15	0.72	24.97	-33.7	-25.7	-41.3	0.25	1.50	-80.2	-104.5	-125.3	-145.2	86.7	-123.85
6.00	15.51	1788.2	1769.2	1760.4	1.54	1.20	0.80	24.98	-33.5	-25.4	-40.7	0.26	1.54	-81.3	-103.8	-124.9	-145.3	100.0	-125.06
7.00	16.08	1804.1	1784.8	1775.8	1.43	1.18	0.86	24.99	-34.0	-25.7	-41.4	0.28	1.13	-83.1	-104.5	-125.1	-145.0	148.1	-128.48
7.50	16.23	1812.2	1792.9	1783.8	1.40	1.14	0.85	25.01	-34.2	-25.0	-39.8	0.28	0.90	-82.7	-104.4	-125.0	-144.9	177.0	-130.03
8.00	16.23	1820.5	1801.0	1791.8	1.41	1.10	0.81	25.02	-34.0	-24.6	-40.5	0.28	0.80	-80.2	-104.0	-124.8	-145.0	211.6	-131.61
9.00	15.73	1836.8	1817.2	1807.8	1.40	1.06	0.74	25.05	-33.7	-25.1	-39.0	0.25	1.73	-78.2	-103.6	-124.7	-144.6	302.4	-134.73
9.50	15.14	1844.7	1825.0	1815.6	1.44	1.09	0.73	25.07	-33.8	-24.5	-39.2	0.23	2.07	-79.3	-103.9	-124.3	-144.2	361.5	-136.27
10.00	14.31	1852.2	1832.6	1823.1	1.50	1.07	0.75	25.09	-33.6	-24.0	-39.5	0.22	2.03	-78.9	-103.4	-124.0	-144.2	507.5	-139.23
10.50	13.34	1859.3	1839.7	1830.3	1.54	1.09	0.75	25.11	-33.6	-23.7	-39.0	0.20	1.66	-78.6	-103.4	-124.1	-144.3	606.7	-140.84
11.00	12.43	1866.1	1846.4	1837.0	1.57	1.14	0.76	25.13	-33.7	-24.2	-38.7	0.20	1.17	-79.2	-103.8	-124.3	-144.4	851.6	-143.73
12.00	10.96	1878.5	1858.4	1849.1	1.62	1.22	0.84	25.18	-33.7	-24.3	-38.2	0.23	0.50	-77.6	-103.5	-123.8	-144.1	1000.0	-145.01

*at 25°C unless mentioned otherwise



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