

Coaxial

Voltage Controlled Oscillator

ZX95-2500+

Wide Band 1600 to 2500 MHz



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2500-S+

Features

- wide band, 1600 to 2500 MHz
- low pushing, 2MHz/V typ.
- protected by US Patent 6,790,049

Applications

- r & d
- lab
- instrumentation
- test equipment

+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				TUNING					NON HARMONIC SPURIOUS (dBc)		HARMONICS (dBc)		PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
				dBc/Hz SSB at offset frequencies, kHz				VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	Typ.	Typ.	Typ.	Typ.	Typ.			Max.	Vcc (volts)	Current (mA)
				Typ.	1	10	100														
ZX95-2500+	1600	2500	+7.5	-62	-89	-111	-131	0.5	14	70-118	40	20	-90	-16	-	18	2	12	28		

Maximum Ratings

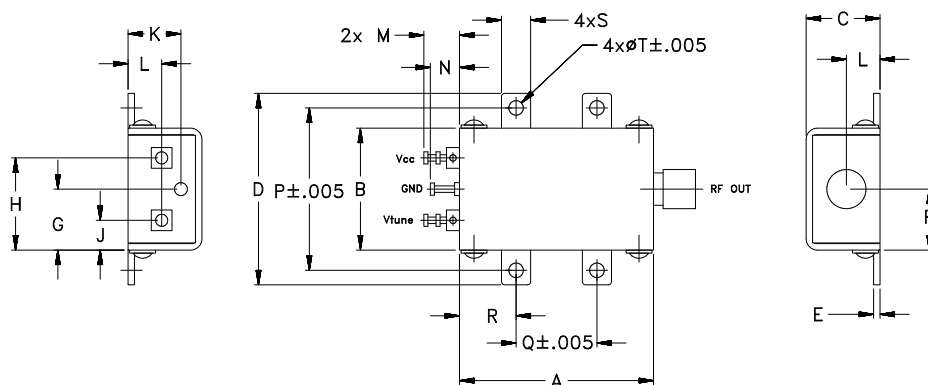
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	12.6V
Absolute Max. Tuning Voltage (Vtune)	16.0V
All specifications	50 ohm system

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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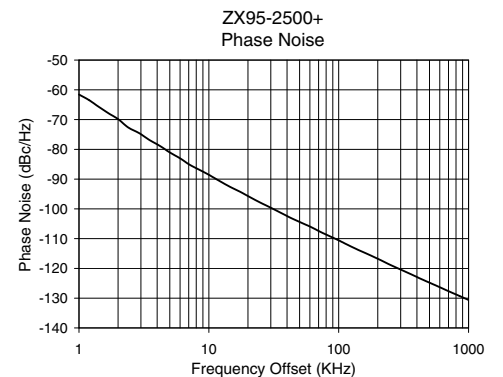
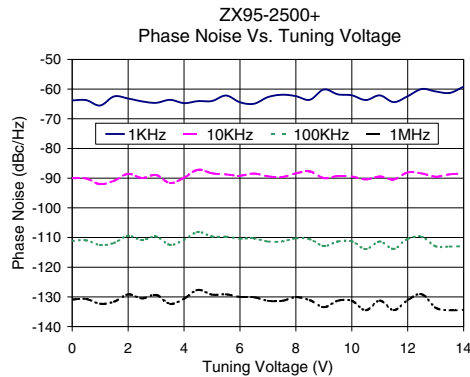
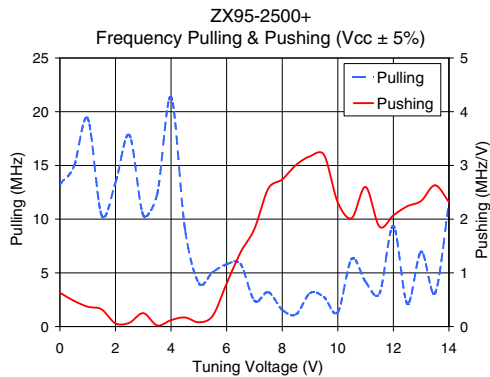
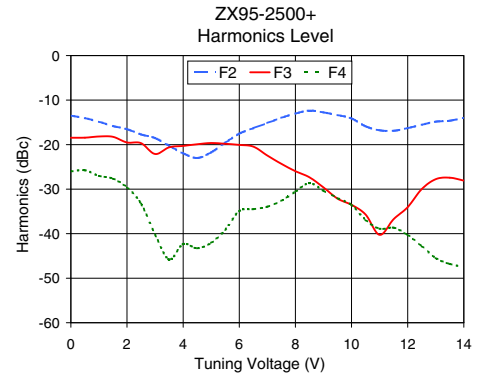
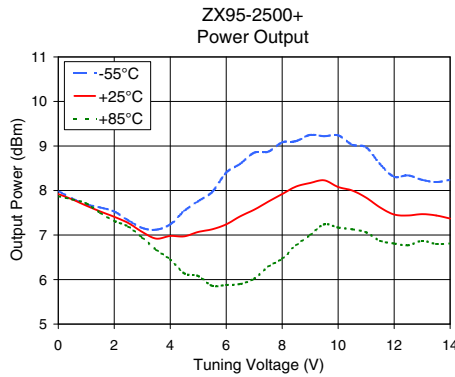
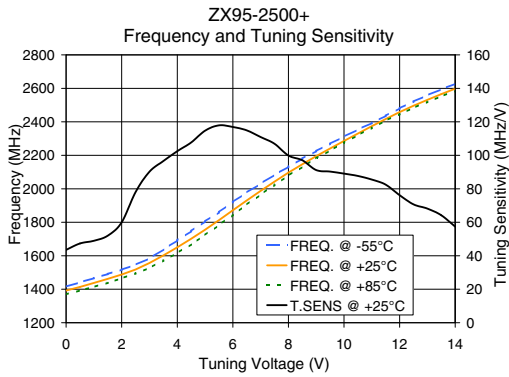
REV. E
M152326
EDR-10323MPF1
ZX95-2500+
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Performance Data & Curves*

ZX95-2500+

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 2050 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	43.50	1415.9	1392.1	1369.8	7.99	7.92	7.87	23.07	-13.5	-18.5	-26.0	0.63	13.23	-63.8	-90.0	-111.1	-130.9	1.0	-61.58
0.50	47.36	1440.9	1413.8	1392.6	7.82	7.80	7.80	23.03	-14.0	-18.4	-25.8	0.48	14.88	-63.7	-90.1	-111.0	-130.7	2.0	-69.83
1.00	48.94	1466.2	1437.5	1413.9	7.69	7.66	7.71	22.99	-14.9	-18.2	-27.0	0.37	19.37	-65.5	-92.1	-112.5	-132.3	3.5	-76.91
2.00	59.95	1516.3	1488.0	1465.4	7.53	7.41	7.32	22.89	-16.5	-19.5	-29.6	0.06	13.40	-63.2	-88.6	-109.4	-129.2	6.0	-83.01
3.00	90.18	1584.2	1557.0	1527.3	7.16	7.07	6.94	22.79	-18.5	-22.1	-40.2	0.25	10.35	-64.6	-88.9	-109.7	-129.3	8.5	-86.92
3.50	96.61	1637.3	1602.1	1571.4	7.12	6.92	6.67	22.78	-20.3	-20.6	-45.8	0.02	12.31	-63.6	-91.6	-112.5	-132.3	10.0	-88.55
4.00	102.48	1692.4	1650.4	1616.7	7.24	6.98	6.45	22.78	-21.9	-20.3	-42.3	0.12	21.37	-64.7	-89.9	-110.8	-130.6	20.8	-96.09
5.00	114.70	1805.0	1755.4	1723.7	7.76	7.07	6.08	22.77	-21.7	-19.6	-42.1	0.08	4.03	-64.0	-88.4	-109.7	-129.2	35.5	-101.24
6.00	116.92	1921.0	1871.8	1844.2	8.40	7.24	5.88	22.80	-17.5	-20.1	-34.9	0.80	5.80	-64.4	-89.2	-110.4	-130.0	60.7	-106.03
6.50	114.91	1978.2	1930.2	1905.8	8.60	7.42	5.90	22.82	-16.3	-20.4	-34.5	1.38	5.83	-65.0	-88.4	-110.3	-130.1	86.7	-109.32
7.00	110.92	2030.7	1987.7	1965.5	8.85	7.57	6.02	22.86	-15.1	-22.5	-33.9	1.82	2.41	-62.7	-89.4	-111.4	-131.3	100.0	-110.57
7.50	106.91	2083.8	2043.1	2023.1	8.87	7.75	6.29	22.89	-14.0	-24.3	-32.6	2.57	3.20	-61.9	-89.6	-111.3	-131.4	148.1	-114.18
8.00	99.85	2132.2	2096.6	2079.1	9.08	7.92	6.47	22.92	-13.0	-26.0	-30.6	2.74	1.56	-62.4	-88.4	-110.3	-130.1	177.0	-115.70
9.00	91.20	2225.0	2195.0	2181.9	9.25	8.17	7.00	22.96	-12.8	-29.6	-30.3	3.17	3.12	-60.1	-90.0	-112.9	-133.5	211.6	-117.28
10.00	89.08	2311.6	2285.8	2275.5	9.24	8.08	7.17	22.95	-14.1	-33.5	-33.6	2.31	1.33	-62.1	-89.4	-111.3	-131.3	302.4	-120.45
11.00	85.52	2393.0	2374.2	2363.5	8.97	7.84	7.06	23.01	-16.8	-40.3	-38.9	2.60	4.16	-62.1	-89.5	-111.3	-131.2	361.5	-121.98
12.00	76.16	2480.6	2458.1	2445.9	8.31	7.46	6.81	23.04	-16.3	-34.0	-40.3	2.07	9.35	-62.4	-88.1	-110.5	-131.1	507.5	-124.91
12.50	70.69	2521.1	2496.2	2483.7	8.34	7.44	6.77	23.04	-15.5	-30.0	-42.8	2.24	2.14	-60.0	-88.4	-109.7	-129.1	606.7	-126.41
13.00	68.17	2558.6	2531.6	2519.4	8.24	7.47	6.87	23.04	-14.8	-27.8	-45.5	2.34	6.96	-60.8	-89.5	-112.9	-133.7	851.6	-129.28
14.00	57.38	2627.3	2597.7	2584.5	8.24	7.37	6.81	22.99	-14.0	-28.1	-47.5	2.32	11.46	-59.2	-88.5	-112.9	-134.4	1000.0	-130.61

*at 25°C unless mentioned otherwise



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