

Coaxial

# Voltage Controlled Oscillator

## ZX95-2243C+

Low Noise 2185 to 2243 MHz

### Features

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



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2243C-S+

### Applications

- r & d
- lab
- instrumentation
- WiMAX 2.5 GHz
- point-to-point

**+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.	1	10	100	1000	VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Max.	Typ.
ZX95-2243C+	2185	2243	+4.8	-86	-114	-135	-154	0.5	5	21	14	85	-90	-29	-20	0.7	0.1	4.75	39

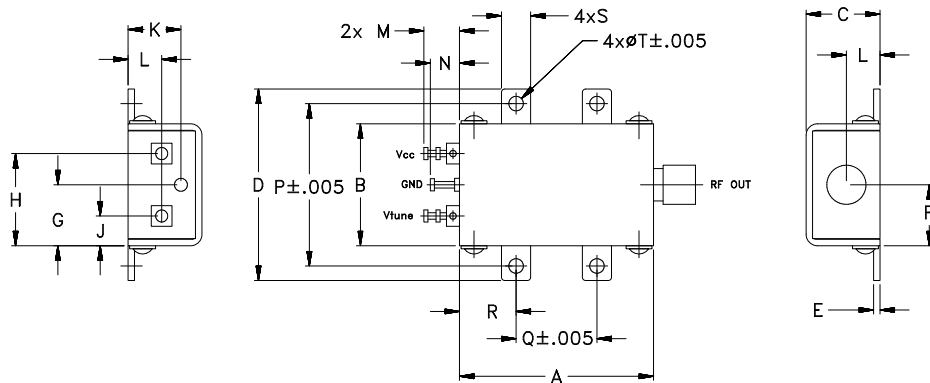
### Maximum Ratings

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) 7V  
 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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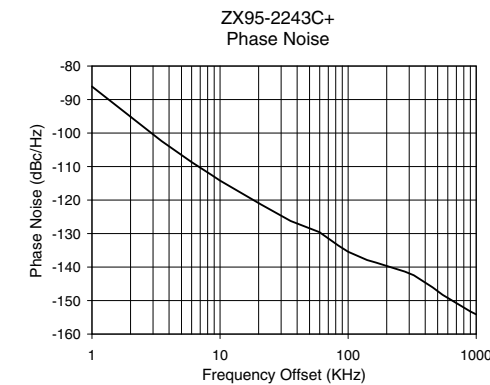
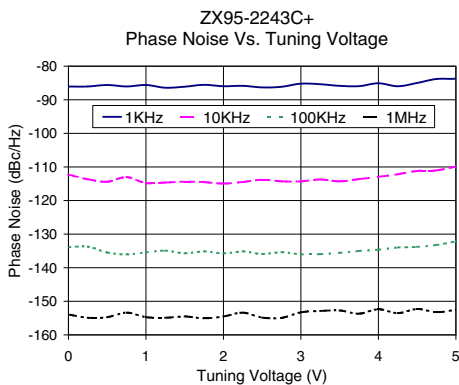
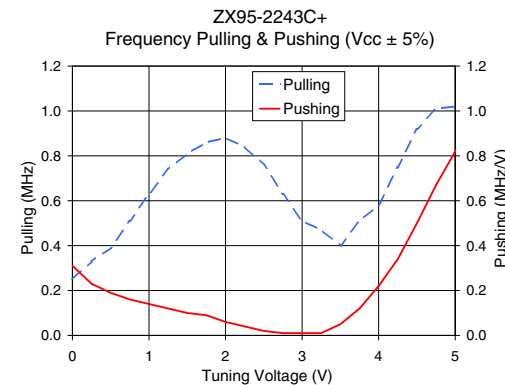
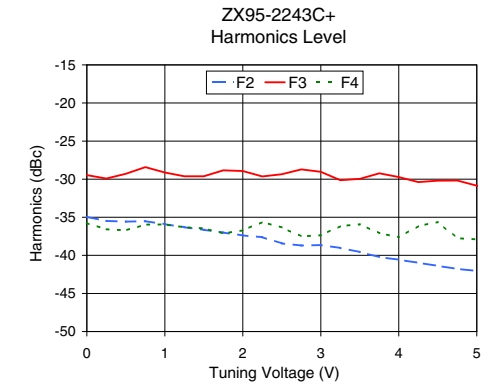
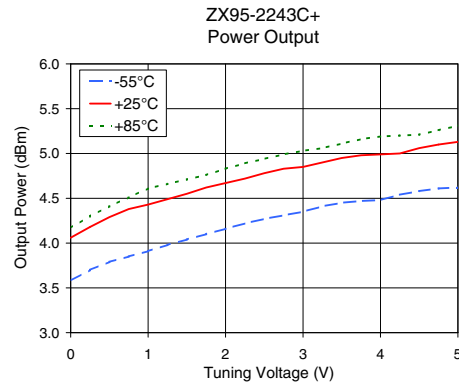
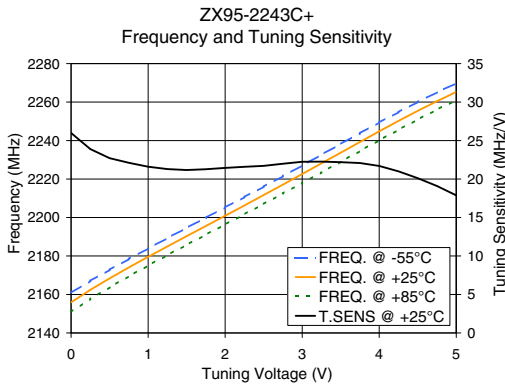
REV. A  
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 Page 1 of 2

# Performance Data & Curves\*

# ZX95-2243C+

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 2210 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	25.99	2160.8	2155.9	2150.9	3.58	4.06	4.17	31.62	-35.0	-29.5	-35.8	0.31	0.25	-86.1	-112.3	-133.9	-153.9	1.0	-86.10
0.25	23.89	2167.0	2162.4	2157.7	3.70	4.18	4.30	31.73	-35.5	-29.9	-36.6	0.23	0.33	-86.0	-113.7	-133.7	-154.9	2.0	-95.13
0.50	22.71	2172.9	2168.4	2163.8	3.79	4.29	4.41	31.83	-35.6	-29.3	-36.7	0.19	0.39	-85.6	-114.4	-135.5	-154.7	3.5	-102.39
0.75	22.11	2178.5	2174.0	2169.5	3.85	4.38	4.51	31.91	-35.5	-28.4	-36.0	0.16	0.51	-86.0	-113.0	-136.1	-153.4	6.0	-108.67
1.00	21.60	2183.9	2179.6	2175.0	3.91	4.43	4.61	31.98	-35.9	-29.1	-35.9	0.14	0.63	-85.6	-114.8	-135.4	-154.7	8.5	-112.39
1.25	21.30	2189.3	2185.0	2180.4	3.98	4.49	4.66	32.06	-36.3	-29.6	-36.3	0.12	0.74	-86.4	-114.6	-134.9	-154.9	10.0	-114.20
1.50	21.17	2194.6	2190.3	2185.8	4.04	4.55	4.71	32.13	-36.6	-29.6	-36.5	0.10	0.81	-86.1	-114.4	-135.7	-154.5	20.8	-121.29
1.75	21.27	2199.9	2195.6	2191.1	4.10	4.62	4.76	32.18	-37.0	-28.8	-37.1	0.09	0.86	-85.6	-114.5	-135.2	-155.1	35.6	-126.25
2.00	21.44	2205.2	2200.9	2196.4	4.16	4.67	4.83	32.23	-37.4	-28.9	-36.7	0.06	0.88	-86.0	-114.9	-135.8	-154.5	59.7	-129.58
2.25	21.59	2210.6	2206.3	2201.7	4.22	4.72	4.89	32.28	-37.6	-29.6	-35.6	0.04	0.84	-85.9	-114.5	-135.1	-153.4	83.8	-133.56
2.50	21.71	2216.0	2211.7	2207.0	4.27	4.78	4.94	32.33	-38.4	-29.4	-36.4	0.02	0.76	-86.3	-113.8	-135.9	-154.9	100.0	-135.43
2.75	21.98	2221.5	2217.1	2212.5	4.31	4.83	4.99	32.36	-38.7	-28.7	-37.5	0.01	0.63	-86.1	-114.3	-135.4	-154.9	140.7	-137.90
3.00	22.24	2227.1	2222.6	2217.9	4.35	4.85	5.03	32.38	-38.7	-29.0	-37.4	0.01	0.51	-85.2	-114.3	-136.0	-153.3	165.2	-138.67
3.25	22.26	2232.6	2228.1	2223.4	4.41	4.90	5.06	32.40	-39.0	-30.1	-36.2	0.01	0.47	-85.4	-113.7	-136.0	-152.9	197.5	-139.61
3.50	22.19	2238.2	2233.7	2229.0	4.45	4.95	5.11	32.42	-39.6	-30.0	-35.9	0.05	0.40	-85.9	-114.3	-135.6	-152.7	277.2	-141.35
3.75	22.08	2243.8	2239.3	2234.6	4.47	4.98	5.16	32.42	-40.2	-29.2	-37.1	0.12	0.51	-86.0	-113.6	-135.0	-153.7	325.5	-142.44
4.00	21.70	2249.4	2244.8	2240.1	4.48	4.99	5.19	32.42	-40.6	-29.7	-37.6	0.22	0.58	-85.1	-112.9	-134.7	-152.4	457.0	-146.05
4.25	20.99	2254.8	2250.2	2245.6	4.54	5.00	5.20	32.41	-41.0	-30.4	-36.2	0.34	0.75	-86.0	-112.2	-134.0	-153.5	546.3	-148.28
4.50	20.11	2260.0	2255.5	2250.9	4.58	5.06	5.21	32.40	-41.4	-30.2	-35.6	0.50	0.92	-85.0	-111.2	-133.8	-152.3	900.7	-153.27
5.00	17.87	2269.8	2265.3	2261.0	4.62	5.13	5.31	32.36	-42.1	-30.9	-37.9	0.82	1.02	-83.7	-109.9	-132.2	-152.5	1000.0	-154.13

\*at 25°C unless mentioned otherwise



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