

# Voltage Controlled Oscillator

## ZX95-5363C+

Frequency Doubling 5223 to 5363 MHz

### Features

- frequency based on multiplication of carrier frequency
- low phase noise
- low pushing & pulling
- 5V tuning voltage range
- protected by US patent 6,790,049



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-5363C-S+

### Applications

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

**+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				
	F 2X(1/2F)			Typ.				VOLTAGE RANGE (V)	SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Max.	F0.5	F1.5			F2	Typ.	Typ.	Vcc (volts)	Current (mA)
	Min.	Max.		Typ.	1	10	100															
ZX95-5363C+	5223	5363	0	-75	-102	-122	-140	0.5	5	55-70	16	180	-90	-15	-15	-14	0.5	1	5	35		

### Maximum Ratings

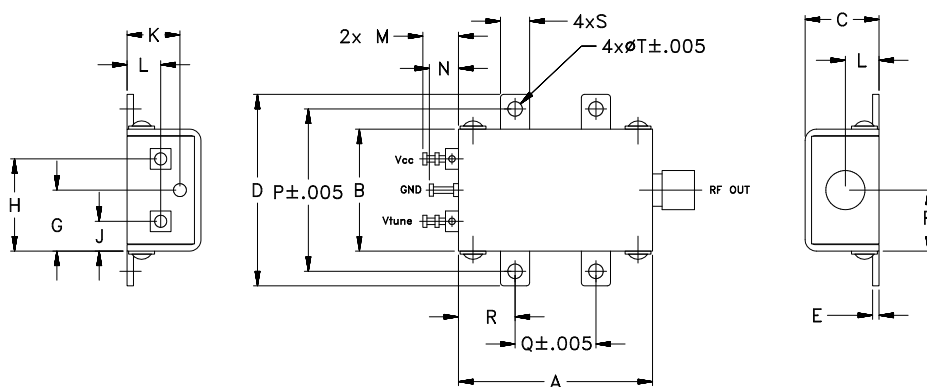
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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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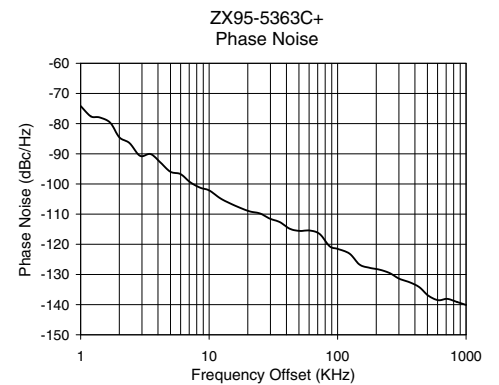
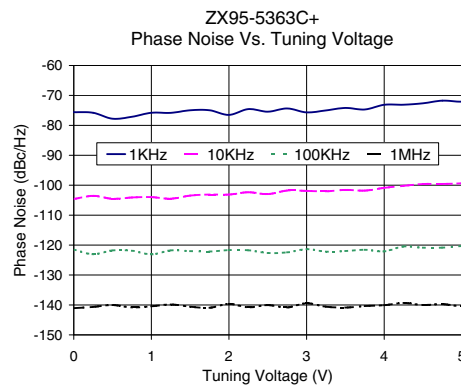
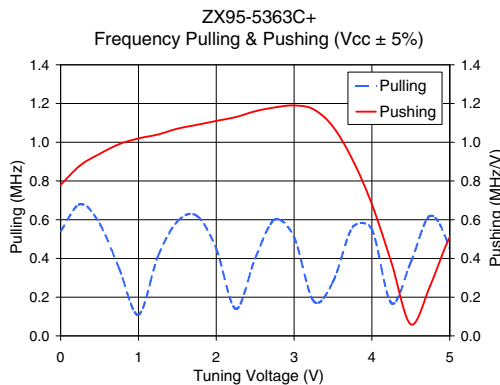
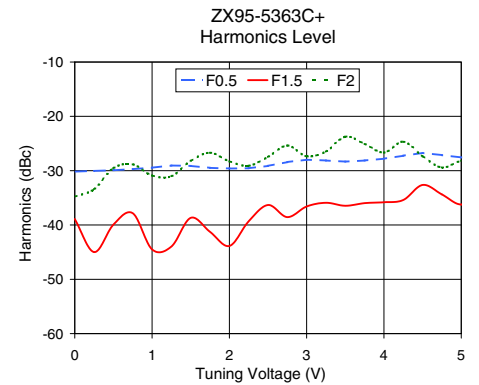
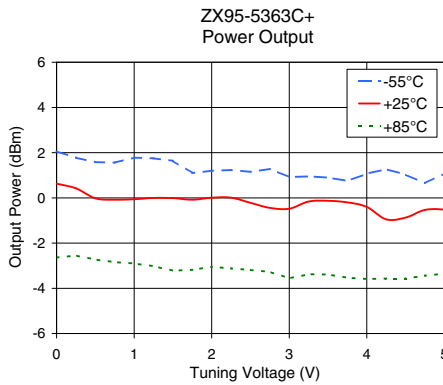
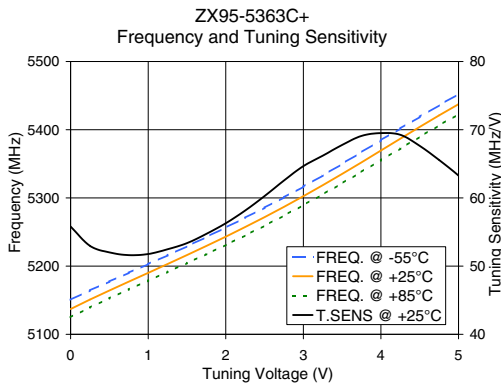


# Performance Data & Curves\*

# ZX95-5363C+

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 5293 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F0.5	F1.5	F2			1kHz	10kHz	100kHz	1MHz		
0.00	55.80	5150.7	5137.0	5125.1	2.06	0.63	-2.64	26.13	-30.2	-38.9	-34.8	0.78	0.54	-75.6	-104.6	-121.5	-141.1	1.0	-74.16
0.25	52.97	5164.3	5151.0	5139.2	1.78	0.42	-2.55	26.16	-30.1	-45.0	-33.4	0.88	0.68	-75.8	-103.6	-123.1	-140.7	2.0	-84.53
0.50	52.01	5177.3	5164.2	5152.8	1.58	-0.02	-2.73	26.18	-29.9	-39.9	-29.5	0.94	0.58	-77.8	-104.5	-121.8	-140.0	3.5	-90.09
0.75	51.61	5190.3	5177.2	5165.9	1.56	-0.08	-2.84	26.19	-29.7	-37.8	-28.8	0.99	0.35	-77.1	-104.1	-121.9	-140.8	6.0	-96.73
1.00	51.77	5203.0	5190.1	5178.7	1.78	-0.06	-2.90	26.20	-29.5	-44.5	-30.9	1.02	0.11	-75.8	-104.0	-123.1	-140.5	8.5	-101.23
1.25	52.47	5215.9	5203.1	5191.5	1.75	0.00	-3.02	26.22	-29.1	-44.0	-31.0	1.04	0.41	-75.8	-104.5	-121.8	-139.9	10.0	-102.12
1.50	53.37	5229.1	5216.2	5204.5	1.64	-0.01	-3.22	26.23	-29.1	-38.7	-28.2	1.07	0.59	-75.0	-103.5	-122.0	-140.6	20.8	-109.11
1.75	54.73	5242.6	5229.5	5217.6	1.10	-0.08	-3.18	26.24	-29.5	-41.3	-26.7	1.09	0.62	-75.0	-103.1	-122.1	-141.0	35.5	-112.64
2.00	56.28	5256.5	5243.2	5231.1	1.20	0.01	-3.05	26.25	-29.6	-43.9	-28.3	1.11	0.45	-76.5	-103.1	-121.7	-139.6	60.7	-115.43
2.25	58.15	5270.8	5257.3	5245.0	1.23	0.01	-3.12	26.26	-29.6	-39.3	-29.1	1.13	0.14	-74.6	-102.3	-121.7	-140.8	86.7	-120.66
2.50	60.27	5285.6	5271.8	5259.3	1.15	-0.22	-3.19	26.26	-29.1	-36.3	-27.5	1.16	0.40	-75.4	-103.0	-122.7	-140.1	100.0	-121.51
2.75	62.55	5300.8	5286.9	5274.1	1.28	-0.44	-3.27	26.27	-28.4	-38.6	-25.4	1.18	0.60	-74.4	-101.8	-122.4	-140.8	148.1	-126.72
3.00	64.67	5316.6	5302.5	5289.4	0.92	-0.48	-3.56	26.27	-28.0	-36.6	-27.4	1.19	0.51	-75.7	-101.9	-121.4	-139.4	177.0	-127.78
3.25	66.19	5333.0	5318.7	5305.2	0.95	-0.16	-3.38	26.27	-28.1	-35.9	-26.5	1.17	0.18	-75.0	-102.0	-122.2	-140.6	211.6	-128.40
3.50	67.77	5349.9	5335.2	5321.5	0.90	-0.13	-3.39	26.28	-28.3	-36.5	-23.8	1.08	0.28	-74.2	-101.6	-122.0	-140.9	302.4	-131.43
3.75	69.09	5367.1	5352.2	5338.2	0.75	-0.20	-3.53	26.28	-28.1	-36.0	-25.1	0.91	0.56	-74.7	-101.8	-121.6	-140.4	361.5	-132.56
4.00	69.50	5384.5	5369.5	5355.3	1.07	-0.40	-3.59	26.28	-27.8	-35.8	-26.7	0.68	0.55	-73.1	-100.9	-122.1	-140.1	507.5	-137.00
4.25	69.25	5401.8	5386.8	5372.5	1.27	-0.95	-3.57	26.27	-27.3	-35.4	-24.7	0.38	0.17	-73.1	-100.2	-120.5	-139.3	606.7	-138.52
4.50	67.63	5418.9	5404.1	5389.6	1.03	-0.87	-3.57	26.28	-26.7	-32.6	-27.4	0.06	0.38	-72.6	-99.6	-120.9	-140.0	851.6	-139.12
5.00	63.28	5452.3	5437.4	5422.8	1.08	-0.52	-3.35	26.28	-27.6	-36.2	-28.2	0.51	0.45	-72.1	-99.4	-120.3	-140.4	1000.0	-140.11

\*at 25°C unless mentioned otherwise



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