Coaxial

Voltage Controlled Oscillator
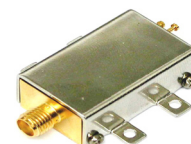
ZX95-100+
ZX95-100

Linear Tuning   50 to 100 MHz

Features

- Linear Tuning
- Octave Bandwidth
- Low Phase Noise
- Low Pushing
- Low Pulling
- Excellent Harmonic Suppression
- Protected by US Patent 6,790,049

Applications

- R & D
- Lab
- Instrumentation
- Test Equipment

CASE STYLE: GB956

Connectors	Model	Price	Qty.
SMA	ZX95-100-S+	$37.95 ea.	(1-9)
SMA	ZX95-100-S	$37.95 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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 Typ.				TUNING					NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dBr (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
								VOLTAGE RANGE (V)		SENSI-TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)						Vcc (volts)	Current (mA)
	Min.	Max.	Typ.	1	10	100	1000	Min.	Max.	Typ.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Typ.		Max.
ZX95-100(+)	50	100	+10	-86	-110	-131	-151	0.5	17	3.5 - 4.5	550	0.18	-90	-33	-24	0.4	0.1	12	20

Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	13V
Absolute Max. Tuning Voltage (Vtune)	18V
All specifications	50 ohm system

Outline Drawing
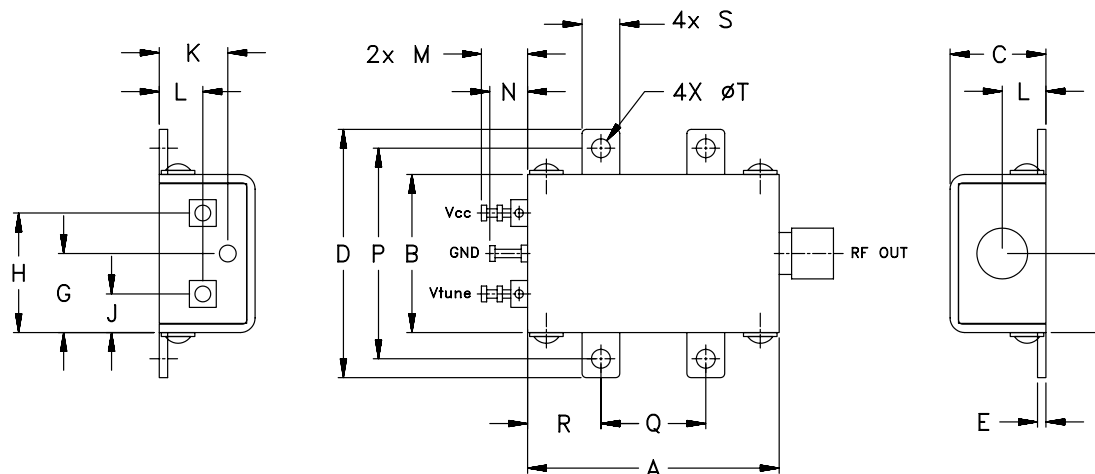
Outline Dimensions (inch / mm)

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**	**.45**	**.57**	**.18**	**.33**	**.21**	**.22**	**.18**	**1.00**	**.50**	**.35**	**.18**	**.09**	grams
30.48	19.05	11.68	29.97	1.02	9.65	11.43	14.48	4.57	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.29	35.0

Performance Data & Curves*

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 75 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1KHz	10KHz	100KHz	1MHz		
0.00	4.96	45.2	44.1	44.0	8.02	7.46	6.55	16.08	-37.0	-38.2	-52.0	0.04	0.05	-84.1	-105.4	-126.9	-150.0	1.0	-85.44
0.50	4.54	47.2	46.6	46.7	8.98	8.54	7.74	15.81	-36.8	-39.3	-52.4	0.00	0.09	-86.9	-109.1	-129.7	-152.3	2.0	-92.96
1.00	4.63	49.3	48.9	49.1	9.71	9.39	8.71	15.47	-37.2	-39.6	-52.6	0.10	0.11	-87.4	-112.9	-132.1	-154.4	3.5	-98.98
2.00	3.72	53.4	53.2	53.4	10.06	9.96	9.41	15.16	-37.5	-38.0	-52.1	0.02	0.06	-88.6	-113.2	-132.8	-153.7	6.0	-104.43
3.00	3.49	56.9	56.9	57.0	10.18	10.03	9.52	14.98	-30.8	-37.3	-50.4	0.03	0.03	-88.8	-112.1	-132.4	-153.2	8.5	-108.14
4.00	3.48	60.3	60.3	60.5	10.23	10.02	9.52	14.88	-29.2	-37.2	-48.4	0.06	0.05	-87.0	-112.2	-131.7	-152.4	10.0	-108.56
5.00	3.58	63.7	63.8	64.0	10.23	9.99	9.46	14.82	-28.9	-37.0	-46.5	0.08	0.07	-86.0	-111.0	-131.1	-151.2	20.8	-115.56
6.00	3.70	67.3	67.4	67.6	10.20	9.94	9.38	14.79	-29.4	-36.7	-44.9	0.08	0.06	-85.8	-110.1	-130.5	-150.7	35.5	-120.41
7.00	3.80	71.1	71.2	71.3	10.14	9.85	9.27	14.79	-30.2	-36.4	-43.3	0.06	0.03	-85.7	-108.8	-129.9	-150.3	60.7	-125.52
8.00	3.86	74.9	75.0	75.2	10.06	9.73	9.14	14.79	-31.0	-36.2	-42.2	0.04	0.01	-86.9	-108.8	-129.7	-149.5	86.7	-128.28
9.00	3.87	78.9	78.8	79.1	9.98	9.61	9.00	14.80	-31.8	-36.1	-41.5	0.02	0.01	-84.8	-109.4	-128.9	-149.5	100.0	-129.57
10.00	3.89	83.0	82.7	82.9	9.88	9.49	8.83	14.80	-32.5	-36.0	-40.9	0.01	0.05	-84.5	-108.4	-129.4	-149.5	148.1	-132.77
11.00	3.95	87.1	86.6	86.8	9.75	9.33	8.62	14.79	-33.3	-35.7	-40.8	0.04	0.14	-86.3	-109.9	-130.1	-149.9	211.6	-135.82
12.00	4.07	91.3	90.6	90.7	9.60	9.13	8.36	14.77	-34.2	-35.6	-40.6	0.06	0.20	-85.5	-110.7	-130.4	-150.2	361.5	-140.42
13.00	4.23	95.5	94.7	94.7	9.42	8.90	8.06	14.75	-35.3	-35.5	-39.8	0.07	0.27	-86.9	-110.0	-130.6	-150.7	432.2	-141.86
14.00	4.41	99.9	99.0	98.9	9.22	8.63	7.73	14.72	-36.5	-35.1	-39.2	0.10	0.41	-85.6	-108.5	-129.3	-150.2	507.5	-143.36
15.00	4.59	104.5	103.4	103.3	8.98	8.32	7.36	14.69	-37.3	-34.8	-38.0	0.15	0.39	-86.7	-107.9	-128.5	-149.7	600.0	-144.84
16.00	4.73	109.2	108.1	107.9	8.73	7.99	6.98	14.65	-37.1	-34.2	-37.0	0.23	0.48	-87.8	-106.0	-127.2	-148.9	712.4	-146.08
16.50	4.78	111.6	110.4	110.2	8.59	7.81	6.78	14.64	-36.8	-33.7	-36.5	0.28	0.54	-87.9	-106.2	-126.8	-148.1	851.6	-148.09
17.00	4.78	114.0	112.8	112.5	8.45	7.63	6.57	14.62	-36.3	-33.3	-35.9	0.34	0.59	-81.9	-104.1	-126.0	-147.6	1000.0	-149.73

*at 25°C unless mentioned otherwise

ZX95-100 Frequency and Tuning Sensitivity

ZX95-100 Power Output

ZX95-100 Harmonics Level

ZX95-100 Frequency Pulling & Pushing (Supply Voltage 12V for Pulling)

ZX95-100 Phase Noise Vs. Tuning Voltage

ZX95-100 Phase Noise
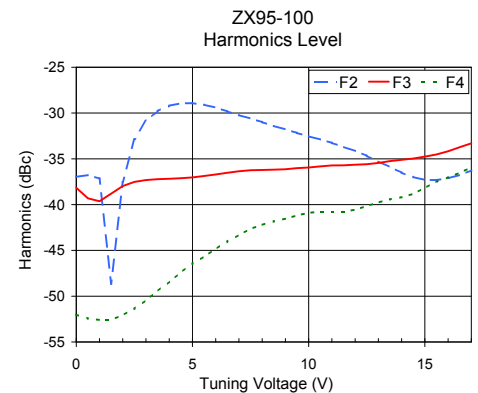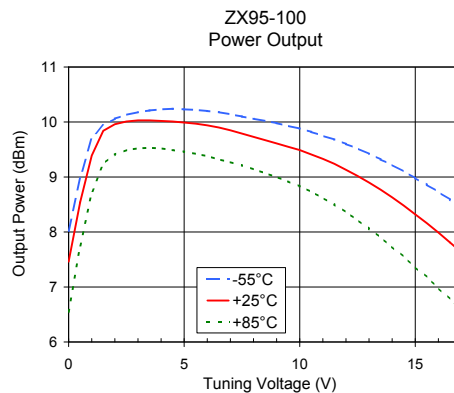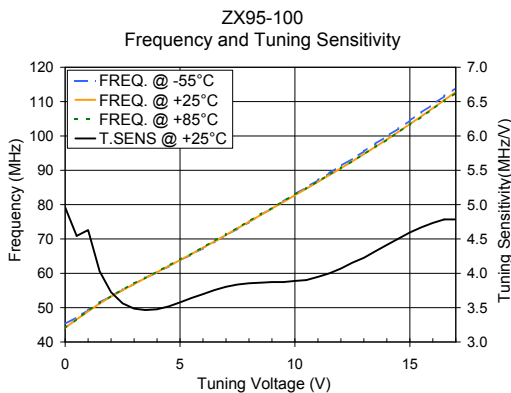
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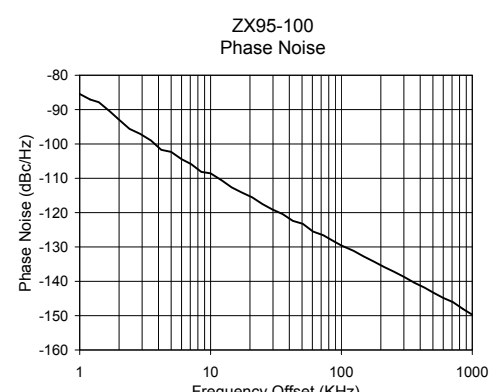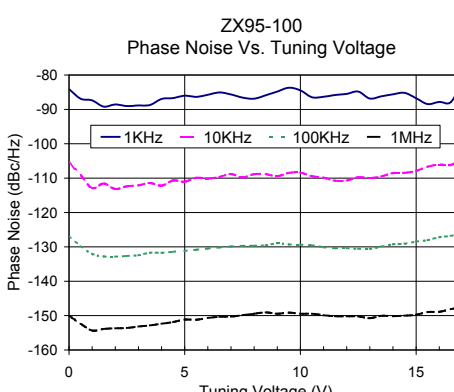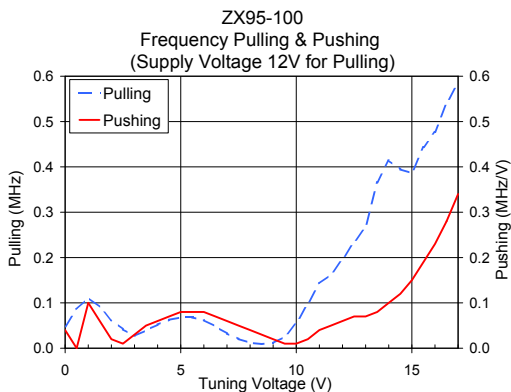
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