

Coaxial

# Voltage Controlled Oscillator

## ZX95-3555+

Linear Tuning 3000 to 3555 MHz

### Features

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

### Applications

- r & d
- lab
- instrumentation
- wireless communications
- satellite systems
- defense systems
- SAP/SAB



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-3555-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.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)		Typ.	Typ.			Typ.	Typ.
ZX95-3555+	3000	3555	+5.5	-71	-97	-118	-138	0.5	15	65-74	12	55	-90	-25	-15	1.5	3	5	41

### Maximum Ratings

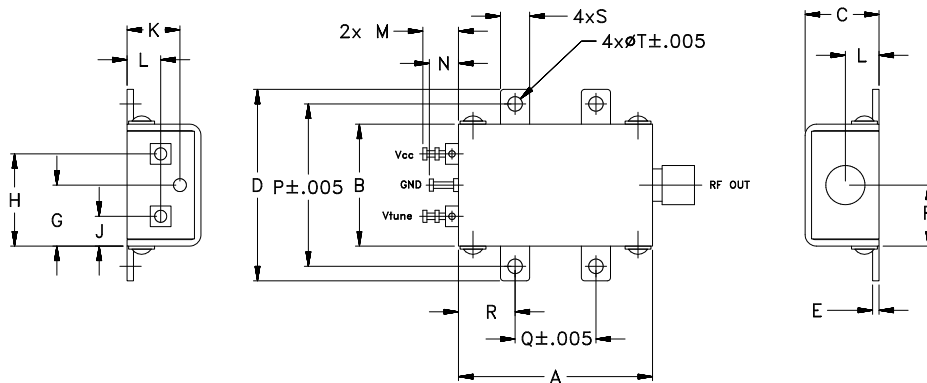
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	16V
All specifications	50 ohm system

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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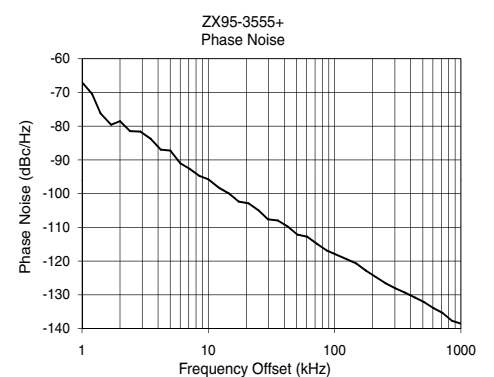
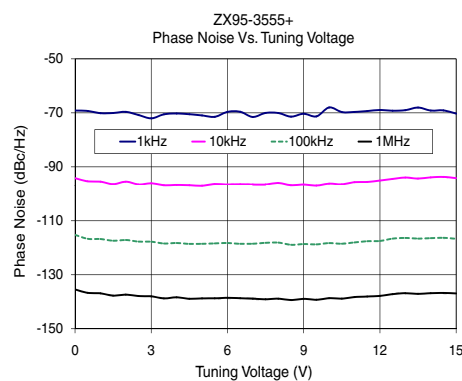
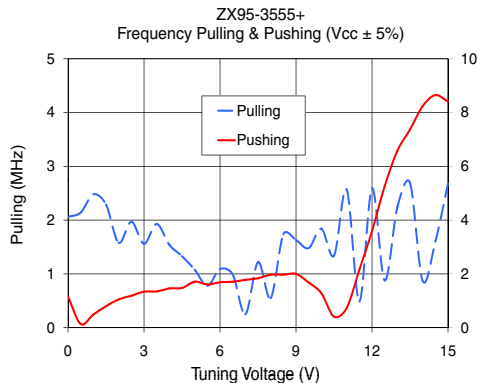
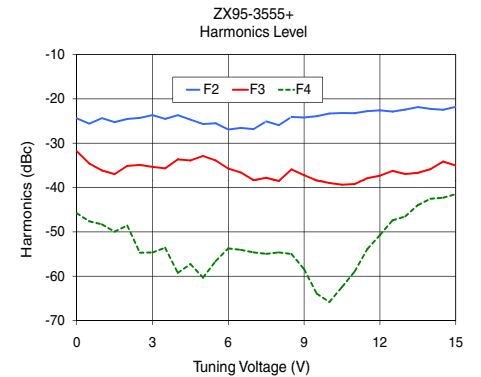
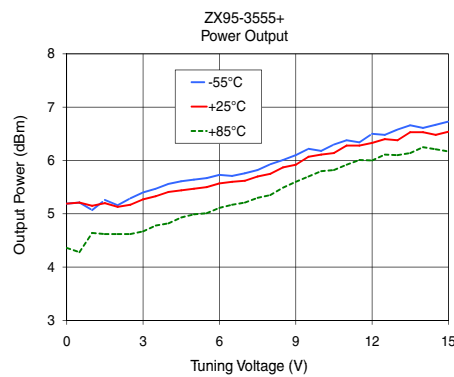
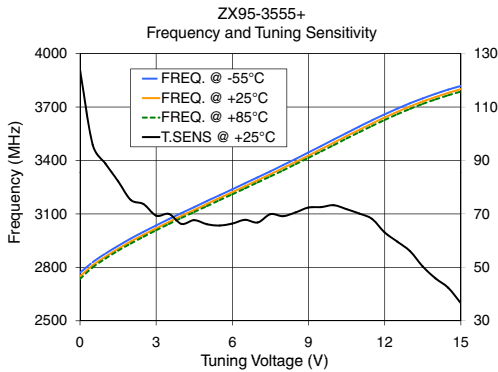
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# Performance Data & Curves\*

# ZX95-3555+

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 3278 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	123.90	2770.0	2749.9	2735.0	5.19	5.19	4.36	34.71	-24.4	-31.8	-45.8	1.16	2.06	-69.15	-94.2	-115.2	-135.4	1.0	-66.99
0.50	95.86	2829.1	2811.9	2800.0	5.21	5.21	4.28	34.74	-25.6	-34.6	-47.6	0.14	2.14	-69.31	-95.4	-116.7	-136.7	2.0	-78.52
1.00	88.86	2877.3	2859.8	2849.0	5.07	5.15	4.64	34.79	-24.3	-36.1	-48.3	0.49	2.48	-70.13	-95.5	-116.8	-136.9	3.5	-83.74
2.00	75.23	2961.5	2945.4	2933.7	5.16	5.13	4.62	34.79	-24.5	-35.1	-48.6	1.05	1.58	-69.64	-95.5	-117.1	-137.4	6.0	-90.99
3.00	69.34	3035.7	3019.8	3008.5	5.40	5.27	4.67	34.85	-23.7	-35.3	-54.6	1.34	1.56	-72.05	-96.1	-117.8	-138.0	8.5	-94.74
4.00	66.25	3105.2	3089.5	3077.9	5.56	5.41	4.82	34.92	-23.7	-33.7	-59.3	1.46	1.54	-70.24	-96.7	-118.2	-138.4	10.0	-95.74
5.00	66.14	3172.6	3156.4	3143.8	5.64	5.47	4.99	34.96	-25.7	-32.9	-60.3	1.71	1.08	-70.96	-97.0	-118.5	-138.8	20.8	-102.88
6.00	66.38	3238.5	3222.3	3210.4	5.73	5.57	5.11	35.08	-26.9	-35.7	-53.7	1.69	1.09	-69.63	-96.6	-118.2	-138.6	35.5	-107.96
7.00	66.80	3305.4	3289.4	3277.0	5.76	5.62	5.21	35.19	-26.8	-38.3	-54.6	1.78	0.25	-71.54	-96.6	-118.5	-138.9	60.7	-112.78
8.00	69.16	3374.2	3357.8	3344.6	5.93	5.75	5.35	35.27	-25.9	-38.5	-54.6	1.97	0.55	-70.08	-96.0	-118.1	-138.9	86.7	-116.86
9.00	72.39	3445.4	3427.7	3414.7	6.10	5.92	5.60	35.39	-24.2	-37.2	-58.4	2.00	1.63	-70.34	-96.6	-118.6	-138.9	100.0	-117.88
10.00	73.25	3518.3	3500.1	3486.6	6.18	6.11	5.80	35.52	-23.3	-39.0	-65.8	1.28	1.84	-68.03	-96.3	-118.3	-138.7	148.1	-120.68
11.00	70.13	3590.6	3572.6	3558.8	6.38	6.28	5.92	35.66	-23.2	-39.2	-58.9	0.73	2.57	-69.67	-95.7	-118.0	-138.3	177.0	-122.83
12.00	63.05	3659.3	3641.8	3627.7	6.50	6.33	6.00	35.81	-22.6	-37.3	-50.7	3.59	2.59	-68.94	-95.1	-117.5	-137.8	211.6	-124.69
12.50	59.58	3691.1	3673.3	3659.9	6.48	6.40	6.11	35.86	-22.9	-36.2	-47.4	5.26	0.88	-69.21	-94.5	-116.6	-137.2	302.4	-128.07
13.00	56.04	3721.5	3703.1	3689.7	6.58	6.38	6.10	35.91	-22.4	-37.0	-46.5	6.58	2.24	-69.02	-94.0	-116.4	-136.8	361.5	-129.36
13.50	50.32	3748.8	3731.1	3717.9	6.66	6.53	6.14	35.96	-21.9	-36.7	-44.0	7.37	2.69	-68.05	-94.4	-116.6	-137.1	507.5	-132.10
14.00	45.90	3774.1	3756.3	3743.0	6.61	6.53	6.25	35.99	-22.3	-35.9	-42.5	8.24	0.87	-69.15	-93.9	-116.4	-136.8	606.7	-133.95
14.50	42.37	3797.7	3779.2	3766.1	6.67	6.48	6.21	36.01	-22.5	-34.1	-42.3	8.65	1.60	-69.10	-93.8	-116.3	-136.7	851.6	-137.74
15.00	36.61	3818.2	3800.4	3786.8	6.73	6.54	6.17	36.01	-21.8	-35.0	-41.5	8.41	2.68	-70.27	-94.2	-116.7	-136.9	1000.0	-138.53

\*at 25°C unless mentioned otherwise



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