

Coaxial

Voltage Controlled Oscillator

ZX95-2800-S+

Wide Band 1400 to 2800 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- test equipment



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2800-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 _r (MHz)	PUSHING (MHz/V)	DC OPERATING POWER	
								VOLTAGE RANGE (V)	SENSI- TIVITY (MHz/V)	PORT CAP (pF)	3 dB MODULATION BANDWIDTH (MHz)	V _{cc} (volts)						Current (mA)	
	Min.	Max.		Typ.	1	10	100	1000	Min.	Max.	Typ.	Typ.		Typ.	Typ.	Max.	Typ.	Typ.	Max.
ZX95-2800-S+	1400	2800	+3.5	-63	-91	-113	-136	0.5	25	42-107	80	10	-90	-15	-	6	4	5	30

Maximum Ratings

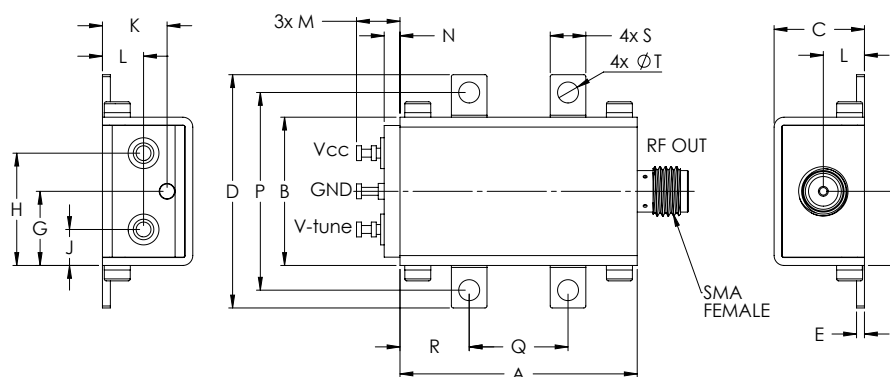
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	7V
Absolute Max. Tuning Voltage (Vtune)	27V
All specifications	50 ohm system

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	.08	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	2.03	25.40	12.70	8.89	4.57	2.69	35.0

Notes

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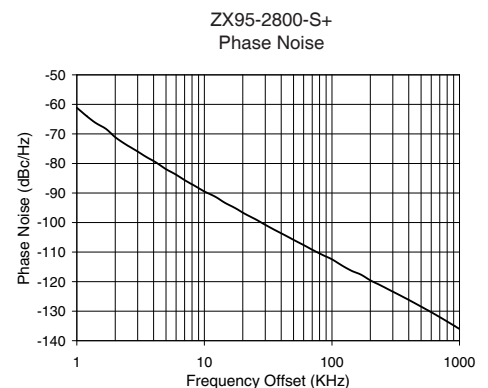
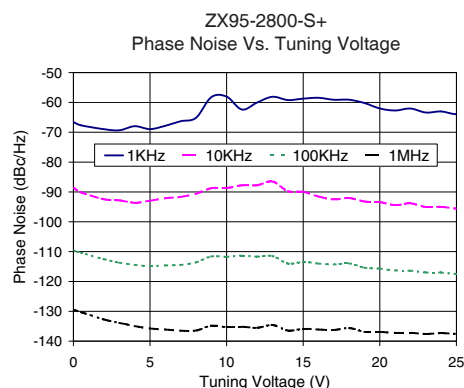
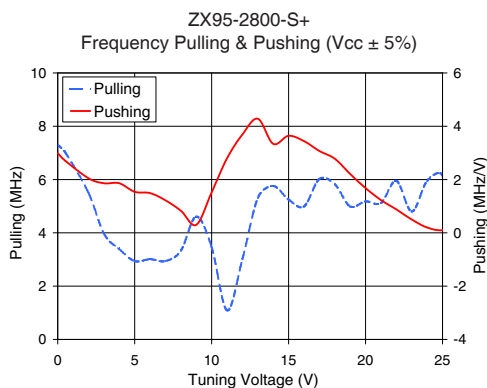
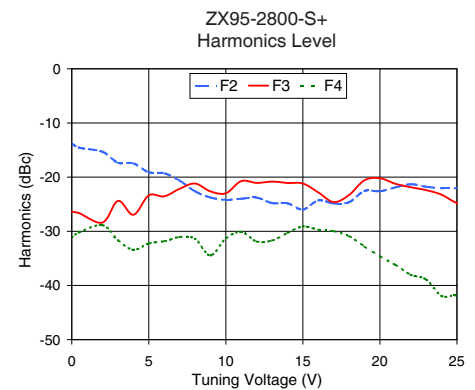
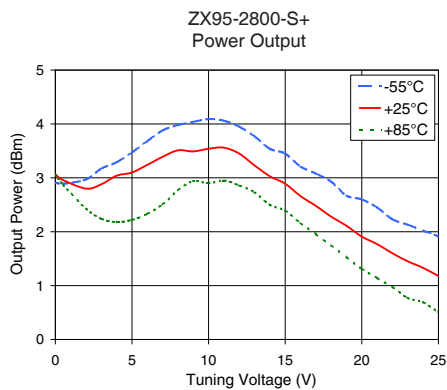
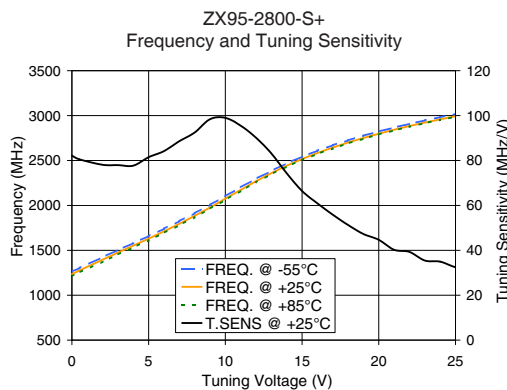
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Performance Data & Curves*

ZX95-2800-S+

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 2100 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	82.14	1262.2	1234.9	1211.6	2.91	3.06	3.06	24.65	-13.8	-26.4	-31.1	2.99	7.30	-66.6	-88.6	-109.7	-129.5	1.0	-61.13
0.50	80.51	1303.5	1276.0	1253.2	2.89	2.96	2.87	24.54	-14.6	-26.7	-30.2	2.70	7.01	-67.7	-90.1	-110.4	-130.3	2.0	-71.09
2.00	78.07	1424.1	1395.9	1374.1	2.97	2.80	2.43	24.33	-15.3	-28.4	-28.9	2.05	5.50	-69.0	-92.4	-112.6	-132.8	3.5	-77.78
3.00	77.95	1503.3	1474.0	1452.7	3.17	2.88	2.24	24.30	-17.3	-24.4	-31.7	1.86	3.97	-69.3	-92.8	-113.7	-133.9	6.0	-83.79
4.00	77.71	1580.0	1551.9	1532.0	3.29	3.04	2.18	24.33	-17.5	-27.0	-33.4	1.86	3.39	-68.0	-93.6	-114.4	-134.9	8.5	-87.70
6.00	84.17	1740.2	1711.1	1693.9	3.68	3.24	2.33	24.44	-19.3	-23.5	-31.8	1.49	3.01	-67.8	-92.1	-114.6	-136.1	10.0	-89.48
8.00	92.47	1912.6	1883.9	1868.6	3.98	3.51	2.77	24.64	-22.6	-21.2	-31.4	0.83	3.33	-65.2	-90.6	-113.6	-136.5	20.8	-97.06
9.00	98.39	2004.8	1976.4	1962.6	4.04	3.49	2.94	24.70	-23.8	-22.6	-34.4	0.30	4.61	-58.2	-88.7	-111.6	-134.8	35.5	-102.48
10.00	98.99	2102.3	2074.8	2061.4	4.09	3.54	2.90	24.77	-24.2	-23.0	-31.3	1.52	3.46	-58.1	-88.7	-111.7	-135.3	60.7	-107.75
11.00	95.49	2202.0	2173.7	2161.3	4.06	3.56	2.95	24.84	-24.0	-20.7	-30.1	2.80	1.09	-62.4	-87.8	-111.3	-135.2	85.2	-111.06
12.00	90.16	2297.0	2269.2	2257.5	3.95	3.45	2.86	24.86	-23.8	-21.1	-31.9	3.69	3.01	-60.0	-87.7	-111.7	-135.5	100.0	-112.44
13.00	83.13	2384.5	2359.4	2347.8	3.77	3.23	2.73	24.85	-24.8	-20.8	-31.7	4.28	5.31	-58.1	-86.5	-111.5	-134.6	142.9	-116.36
14.00	74.30	2468.8	2442.5	2432.2	3.54	3.03	2.50	24.83	-24.8	-21.1	-30.3	3.34	5.76	-59.2	-89.7	-114.0	-136.5	167.8	-117.58
16.00	60.94	2609.2	2583.3	2573.4	3.21	2.66	2.16	24.70	-24.3	-22.8	-29.7	3.44	4.99	-58.4	-91.5	-114.0	-136.1	200.6	-119.58
18.00	51.26	2724.4	2700.1	2690.6	2.93	2.28	1.75	24.54	-24.6	-23.3	-30.9	2.78	5.82	-59.1	-92.0	-114.0	-135.6	281.6	-122.79
19.00	47.26	2776.5	2751.3	2742.0	2.67	2.11	1.53	24.46	-22.6	-20.6	-32.8	2.21	4.99	-60.2	-93.2	-115.4	-136.9	330.7	-124.31
20.00	44.66	2822.7	2798.6	2790.1	2.60	1.91	1.31	24.40	-22.6	-20.2	-34.6	1.68	5.18	-62.0	-93.4	-115.7	-136.9	464.2	-127.70
21.00	40.24	2866.2	2843.3	2834.8	2.45	1.77	1.14	24.35	-21.9	-21.2	-36.2	1.23	5.12	-62.7	-94.4	-116.3	-137.2	554.9	-129.53
23.00	35.46	2946.4	2922.8	2915.8	2.13	1.45	0.77	24.25	-21.8	-22.4	-38.9	0.50	4.80	-63.4	-95.1	-117.0	-137.6	914.6	-134.99
25.00	32.44	3017.0	2993.2	2987.3	1.91	1.18	0.51	24.17	-22.1	-24.8	-41.9	0.10	6.14	-64.0	-95.6	-117.5	-137.5	1000.0	-136.04

*at 25°C unless mentioned otherwise



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