

Coaxial

Voltage Controlled Oscillator

ZX95-2435-S+

Low Noise 2425 to 2435 MHz

Features

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

Applications

- r & d
- lab
- instrumentation
- wireless communications
- outdoor terminal



Generic photo used for illustration purposes only
CASE STYLE: GB956

Connectors	Model
SMA	ZX95-2435-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 Br (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.	Max.			Typ.	Max.
ZX95-2435-S+	2425	2435	+7	-87	-115	-135	-156	0.5	4.5	16	20	130	-90	-20	-10	1	0.04	8	32

Maximum Ratings

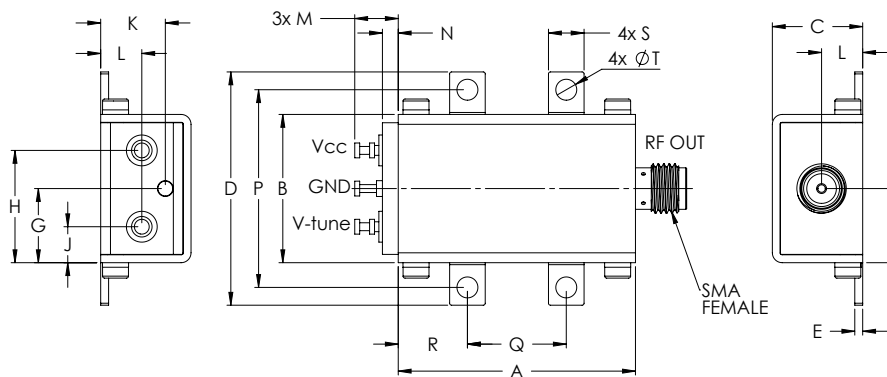
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	9V
Absolute Max. Tuning Voltage (Vtune)	7V
All specifications	50 ohm system

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	.08	1.00	.50	.35	.18	.106	grams
30.48	19.15	11.61	30.07	1.02	9.53	9.53	14.43	4.62	8.31	5.28	5.59	2.03	25.40	12.70	8.89	4.57	2.69	35.0

Notes

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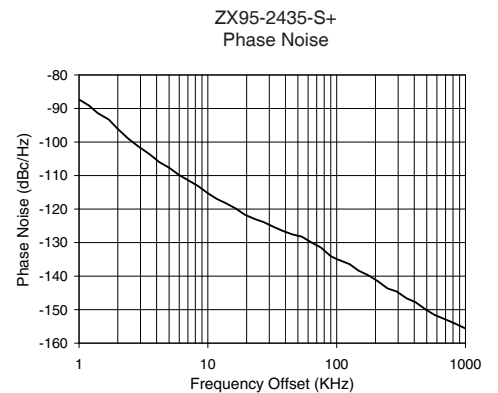
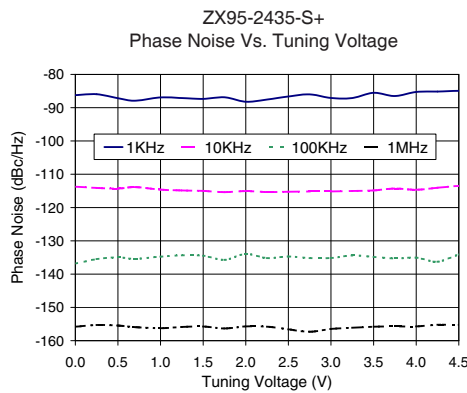
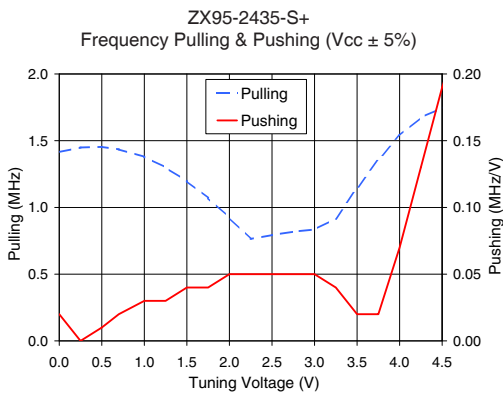
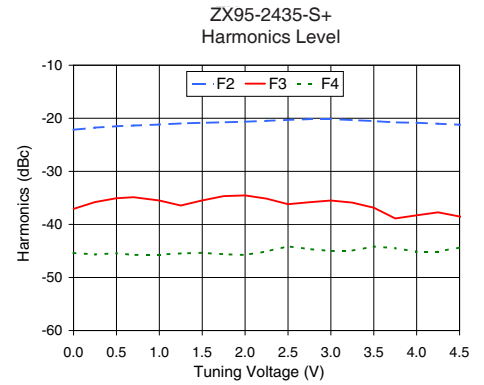
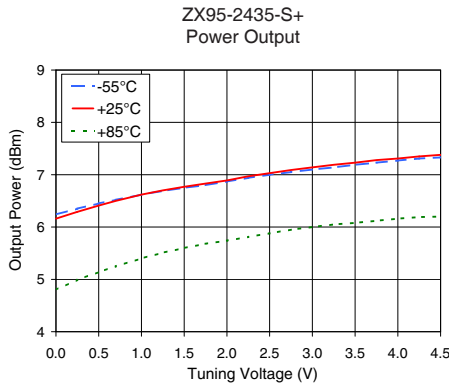
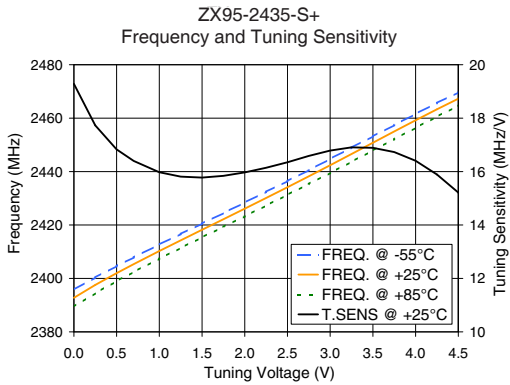


Performance Data & Curves*

ZX95-2435-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 2430 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	19.28	2395.8	2392.7	2389.5	6.24	6.16	4.80	26.49	-22.2	-37.1	-45.4	0.02	1.42	-86.2	-113.7	-136.9	-155.8	1.0	-87.32
0.25	17.73	2400.3	2397.6	2394.5	6.35	6.29	4.99	26.53	-21.8	-35.8	-45.7	0.00	1.45	-86.0	-114.1	-135.5	-155.3	2.0	-96.10
0.50	16.83	2404.6	2402.0	2399.0	6.45	6.41	5.14	26.56	-21.5	-35.1	-45.4	0.01	1.45	-87.2	-114.3	-135.0	-155.5	3.5	-103.52
0.70	16.40	2407.9	2405.4	2402.4	6.52	6.50	5.25	26.58	-21.4	-34.9	-45.8	0.02	1.43	-87.9	-113.9	-135.4	-155.9	6.0	-109.88
1.00	15.98	2412.7	2410.3	2407.4	6.62	6.62	5.40	26.61	-21.2	-35.5	-45.7	0.03	1.38	-86.9	-114.6	-134.8	-156.3	8.4	-113.12
1.25	15.81	2416.6	2414.3	2411.4	6.69	6.70	5.51	26.63	-21.0	-36.4	-45.5	0.03	1.30	-87.1	-114.9	-134.4	-155.9	10.0	-115.27
1.50	15.77	2420.5	2418.2	2415.4	6.75	6.77	5.60	26.65	-20.9	-35.5	-45.4	0.04	1.20	-87.4	-115.0	-134.5	-155.7	19.4	-121.69
1.75	15.84	2424.5	2422.2	2419.3	6.80	6.83	5.68	26.67	-20.8	-34.7	-45.6	0.04	1.07	-86.9	-115.4	-135.7	-156.3	32.5	-125.34
2.00	15.97	2428.4	2426.1	2423.3	6.87	6.89	5.74	26.68	-20.7	-34.5	-45.8	0.05	0.92	-88.2	-115.1	-133.9	-155.7	53.5	-128.22
2.25	16.14	2432.4	2430.1	2427.3	6.94	6.97	5.81	26.70	-20.5	-35.1	-45.1	0.05	0.76	-87.5	-115.4	-135.2	-155.8	75.2	-131.44
2.50	16.35	2436.4	2434.1	2431.3	7.00	7.03	5.88	26.71	-20.3	-36.2	-44.1	0.05	0.79	-86.6	-115.3	-134.7	-156.6	100.0	-134.91
2.75	16.59	2440.6	2438.2	2435.4	7.05	7.09	5.95	26.71	-20.2	-35.8	-44.7	0.05	0.82	-86.0	-115.2	-135.2	-157.3	207.9	-141.49
3.00	16.79	2444.7	2442.4	2439.5	7.10	7.14	6.00	26.71	-20.2	-35.5	-45.0	0.05	0.83	-87.1	-115.2	-135.2	-156.5	248.5	-143.69
3.25	16.91	2448.9	2446.6	2443.7	7.14	7.19	6.05	26.71	-20.3	-35.9	-44.9	0.04	0.92	-87.1	-115.0	-134.4	-156.1	348.8	-146.63
3.50	16.89	2453.2	2450.8	2447.9	7.19	7.23	6.08	26.71	-20.5	-36.9	-44.2	0.02	1.15	-85.5	-114.9	-134.8	-155.8	409.6	-147.80
3.75	16.73	2457.4	2455.0	2452.2	7.23	7.28	6.12	26.70	-20.8	-38.9	-44.5	0.02	1.36	-86.5	-114.3	-135.3	-155.7	489.7	-149.94
4.00	16.40	2461.6	2459.2	2456.4	7.27	7.31	6.16	26.68	-20.8	-38.3	-45.1	0.07	1.54	-85.3	-114.7	-135.1	-155.7	575.0	-151.57
4.25	15.89	2465.7	2463.3	2460.6	7.31	7.35	6.19	26.66	-21.0	-37.7	-45.1	0.13	1.67	-85.1	-114.1	-136.3	-155.2	807.2	-153.95
4.50	15.22	2469.6	2467.3	2464.6	7.33	7.38	6.20	26.65	-21.2	-38.5	-44.4	0.19	1.75	-85.0	-113.5	-134.2	-155.3	1000.0	-155.61

*at 25°C unless mentioned otherwise



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