

# NON-CATALOG

Coaxial

# Voltage Controlled Oscillator

## ZX95-3600B+

Linear Tuning 2950 to 3600 MHz

### Features

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

### Applications

- r & d
- lab
- instrumentation
- military
- radar
- navigation
- point-to-point



CASE STYLE: GB956

Connectors	Model
SMA	ZX95-3600B-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.			Max.	Typ.
ZX95-3600B+	2950	3600	+5.8	-69	-94	-114	-135	1	12	75-95	17	95	-90	-20	-10	3.0	1.1	5	50

### Maximum Ratings

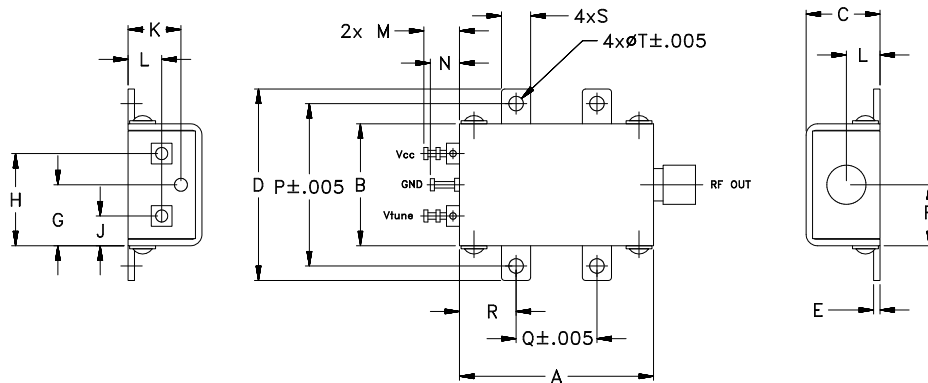
Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	6V
Absolute Max. Tuning Voltage (Vtune)	14V
All specifications	50 ohm system

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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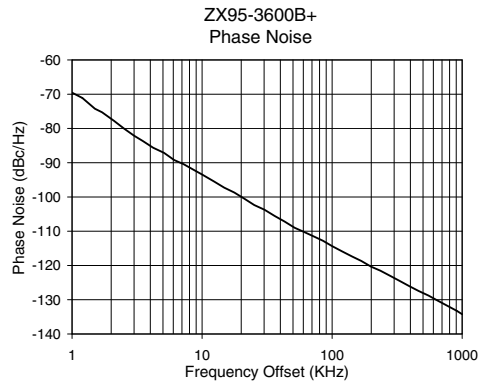
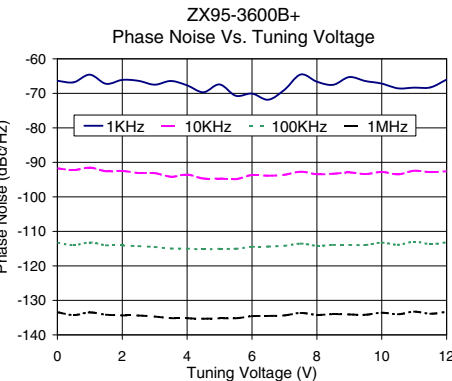
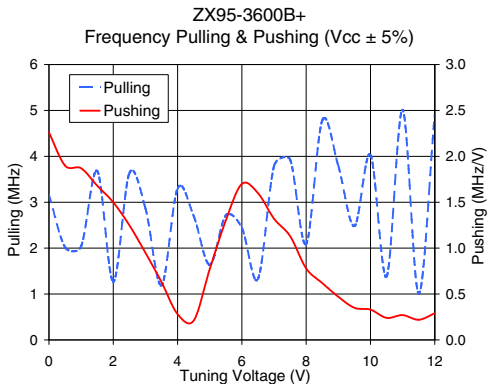
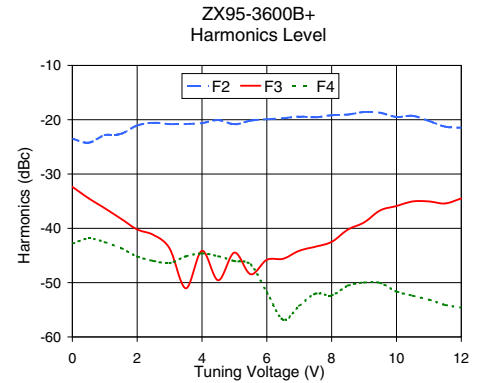
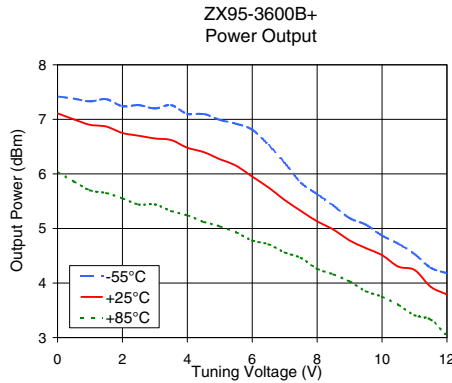
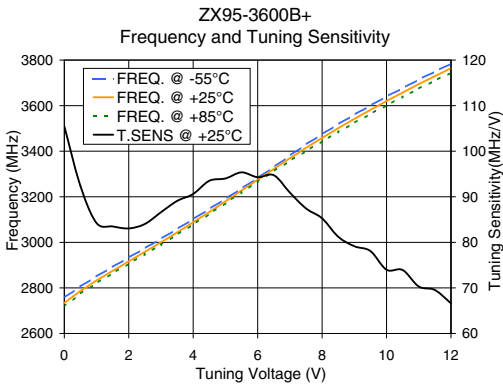
REV. B  
M157541  
EDR-9965/2F2  
ZX95-3600B+  
RAV  
160913  
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## Performance Data & Curves\*

## ZX95-3600B+

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 3275 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	105.47	2757.3	2733.8	2718.3	7.42	7.11	6.04	41.58	-23.5	-32.4	-42.8	2.26	3.16	-66.4	-91.8	-113.3	-133.4	1.0	-69.55
0.50	92.40	2806.1	2786.5	2774.7	7.38	7.00	5.86	41.58	-24.2	-34.5	-41.9	1.90	2.02	-66.8	-92.3	-114.0	-134.3	1.2	-75.08
1.50	83.49	2892.1	2874.9	2864.4	7.37	6.87	5.65	41.50	-22.6	-38.2	-43.6	1.68	3.68	-67.2	-92.6	-114.0	-134.2	1.5	-77.84
2.00	83.06	2933.1	2916.6	2906.2	7.24	6.75	5.55	41.48	-21.1	-40.2	-45.2	1.50	1.27	-66.1	-92.5	-114.1	-134.4	1.7	-80.80
2.50	84.02	2973.8	2958.1	2948.1	7.26	6.70	5.44	41.46	-20.6	-41.2	-46.0	1.25	3.63	-66.4	-93.1	-114.3	-134.4	6.1	-89.22
3.00	86.60	3015.7	3000.1	2990.0	7.20	6.65	5.44	41.45	-20.8	-43.7	-46.4	0.95	2.87	-67.5	-93.1	-114.5	-134.7	10.0	-93.45
4.00	90.62	3101.8	3088.0	3078.7	7.10	6.48	5.24	41.45	-20.6	-44.1	-44.6	0.28	3.30	-67.7	-93.6	-115.0	-135.2	21.1	-100.50
4.50	93.51	3146.5	3133.3	3124.7	7.10	6.40	5.12	41.45	-20.1	-49.6	-45.1	0.21	2.70	-69.7	-94.7	-115.3	-135.3	36.1	-105.53
5.00	94.02	3191.2	3180.1	3171.9	6.99	6.27	5.04	41.47	-20.8	-44.5	-46.0	0.77	1.64	-67.4	-94.7	-115.1	-135.2	60.5	-110.18
5.50	95.35	3236.0	3227.1	3219.3	6.92	6.15	4.93	41.48	-20.2	-48.5	-46.7	1.30	2.71	-70.7	-94.9	-115.1	-135.2	84.9	-112.77
6.00	94.28	3282.2	3274.7	3266.2	6.81	5.95	4.78	41.49	-19.9	-45.8	-51.7	1.70	2.44	-70.1	-93.7	-114.5	-134.6	100.0	-114.35
6.50	94.73	3330.2	3321.9	3312.2	6.53	5.75	4.71	41.50	-19.7	-45.6	-56.8	1.60	1.33	-71.8	-93.9	-114.4	-134.5	142.4	-117.39
7.00	90.93	3380.2	3369.3	3357.7	6.20	5.52	4.56	41.50	-19.4	-44.1	-54.3	1.32	3.79	-69.0	-93.6	-114.2	-134.4	167.2	-118.65
7.50	87.44	3429.5	3414.7	3400.6	5.84	5.32	4.46	41.48	-19.6	-43.4	-52.0	1.13	3.93	-64.5	-92.7	-113.5	-133.6	199.9	-120.38
8.50	81.24	3518.5	3501.1	3484.3	5.42	4.98	4.16	41.46	-19.0	-40.2	-50.6	0.62	4.78	-67.5	-93.3	-113.9	-134.0	280.6	-123.07
9.00	79.16	3560.4	3541.7	3524.5	5.19	4.78	4.03	41.44	-18.6	-38.9	-50.0	0.47	3.79	-65.3	-92.9	-113.9	-134.1	329.4	-124.47
9.50	78.08	3600.3	3581.3	3563.6	5.07	4.64	3.85	41.43	-18.7	-36.7	-50.1	0.35	2.48	-66.5	-93.4	-114.0	-134.2	462.4	-127.44
10.00	73.98	3639.7	3620.3	3601.1	4.87	4.51	3.75	41.41	-19.5	-35.9	-51.6	0.33	4.03	-67.2	-92.8	-113.3	-133.6	552.7	-128.81
11.50	69.53	3749.4	3729.4	3710.1	4.28	3.93	3.33	41.36	-21.3	-35.4	-54.1	0.22	1.01	-68.3	-92.8	-113.7	-133.9	648.9	-130.27
12.00	66.63	3784.3	3764.2	3743.9	4.18	3.79	3.03	41.31	-21.5	-34.5	-54.6	0.29	4.92	-66.0	-92.6	-113.2	-133.3	1000.0	-134.23

\*at 25°C unless mentioned otherwise



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