

Coaxial

Voltage Controlled Oscillator

ZX95-3605+

Linear Tuning 3300 to 3605 MHz

Features

- Linear tuning characteristics
- Low pushing
- Protected by US patent 6,790,049

Applications

- R&D
- LAB
- Instrumentation
- Wireless communications
- WiMAX



CASE STYLE: GB956

| Connectors | Model | Price | Qty. |
|------------|--------------|-------------|-------|
| SMA | ZX95-3605-S+ | \$40.95 ea. | (1-9) |

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

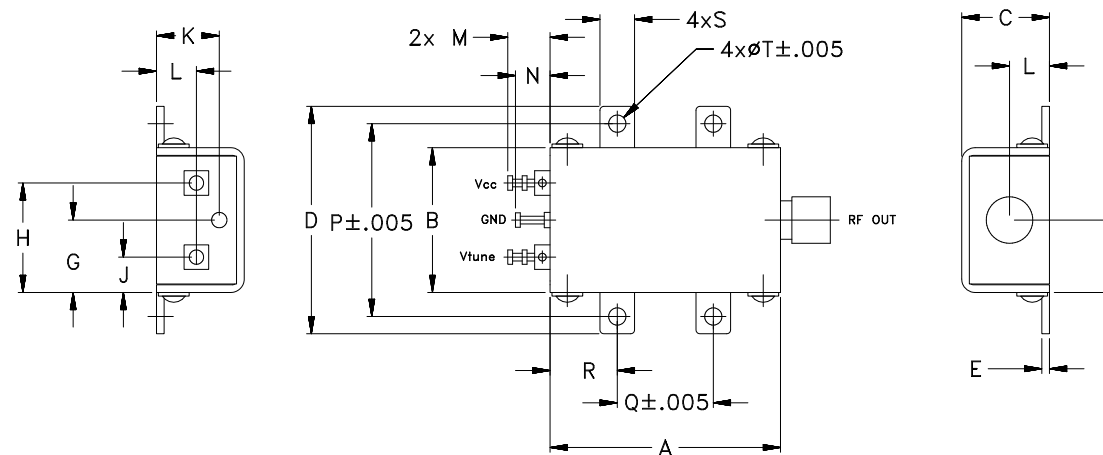
| MODEL NO. | FREQ. (MHz) | | POWER OUTPUT (dBm) | PHASE NOISE dBc/Hz SSB at offset frequencies, kHz | | | | TUNING | | | | | NON HARMONIC SPURIOUS (dBc) | HARMONICS (dBc) | | | PULLING pk-pk @ 12 dB (MHz) | PUSHING (MHz/V) | DC OPERATING POWER | |
|------------|-------------|------|--------------------|---------------------------------------------------|-----|------|------|--------|-------------------|-----------------------|---------------|---------------------------------|-----------------------------|-----------------|------|------|-----------------------------|-----------------|--------------------|------|
| | Min. | Max. | | Typ. | 1 | 10 | 100 | 1000 | VOLTAGE RANGE (V) | SENSI- TIVITY (MHz/V) | PORT CAP (pF) | 3 dB MODULATION BANDWIDTH (MHz) | | Typ. | Typ. | Max. | | | Typ. | Typ. |
| ZX95-3605+ | 3300 | 3605 | +8.5 | -71 | -97 | -118 | -138 | 0.5 | 8 | 47 - 64 | 13 | 550 | -90 | -20 | -15 | 3.5 | 0.6 | 5 | 46 | |

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) | 10V |
| All specifications | 50 ohm system |

Permanent damage may occur if any of these limits are exceeded.

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 | .106 | GRAM |
| 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 | 2.69 | 35.0 |

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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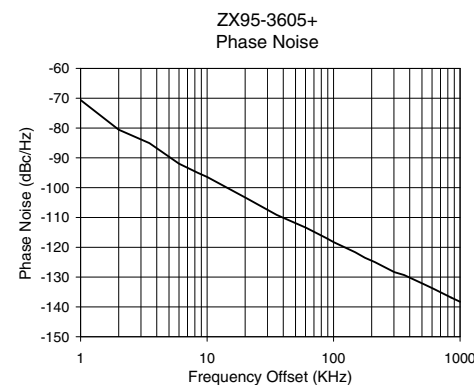
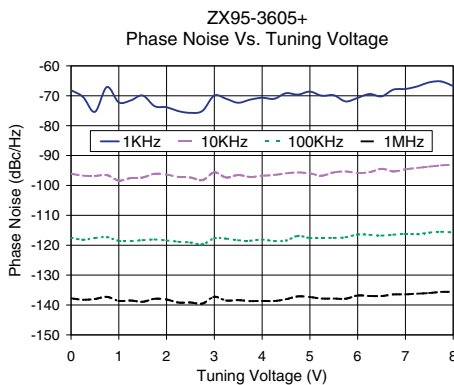
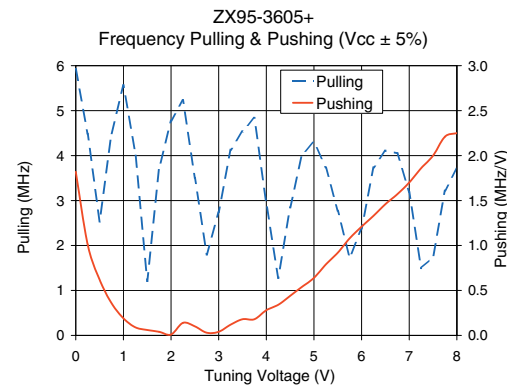
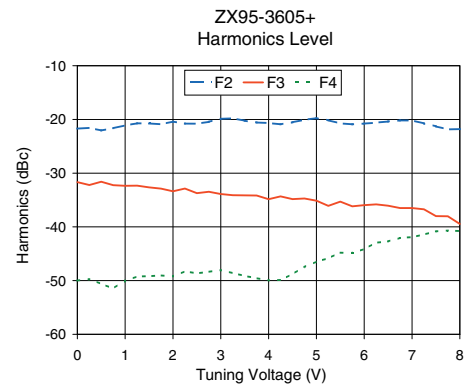
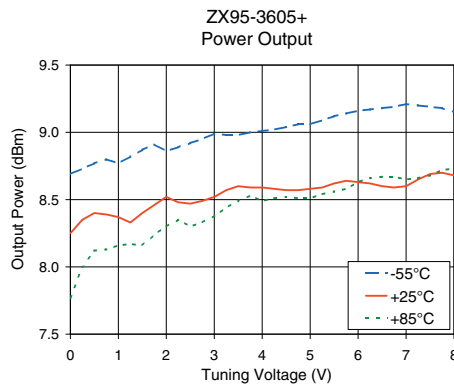
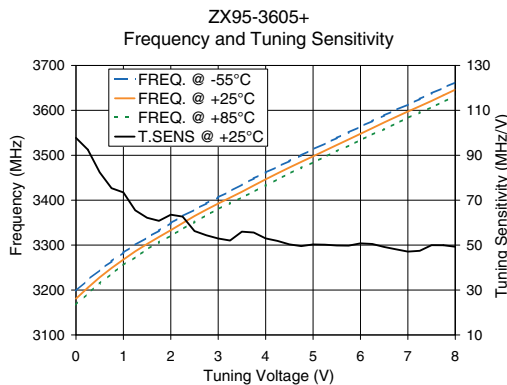
REV. OR
M108877
EDR-8130
ZX95-3605+
RAV
090903
page 1 of 2

Performance Data & Curves*

ZX95-3605+

| 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 3450 MHz (dBc/Hz) |
|--------|-------------------|-----------------|--------|--------|--------------------|-------|-------|----------|-----------------|-------|-------|--------------------|------------------|---------------------------------|-------|--------|--------|-------------------|----------------------------------|
| | | -55°C | +25°C | +85°C | -55°C | +25°C | +85°C | | F2 | F3 | F4 | | | 1kHz | 10kHz | 100kHz | 1MHz | | |
| 0.00 | 97.75 | 3198.0 | 3180.7 | 3167.1 | 8.69 | 8.25 | 7.77 | 39.85 | -21.7 | -31.7 | -50.0 | 1.82 | 5.92 | -68.1 | -96.1 | -117.5 | -137.8 | 1.0 | -70.61 |
| 0.25 | 92.50 | 3222.7 | 3205.1 | 3192.7 | 8.73 | 8.35 | 8.00 | 39.94 | -21.6 | -32.2 | -49.7 | 1.01 | 4.48 | -70.4 | -96.7 | -118.2 | -138.3 | 2.0 | -80.57 |
| 0.50 | 82.40 | 3244.6 | 3228.3 | 3214.4 | 8.77 | 8.40 | 8.12 | 39.92 | -22.1 | -31.6 | -50.6 | 0.62 | 2.54 | -75.4 | -96.8 | -117.6 | -138.0 | 3.5 | -85.08 |
| 1.00 | 73.44 | 3283.3 | 3267.7 | 3255.5 | 8.77 | 8.37 | 8.16 | 40.05 | -21.1 | -32.4 | -50.0 | 0.19 | 5.56 | -72.2 | -98.4 | -118.5 | -138.6 | 6.0 | -91.96 |
| 1.50 | 62.17 | 3316.8 | 3302.4 | 3290.6 | 8.87 | 8.40 | 8.16 | 40.21 | -20.8 | -32.6 | -49.2 | 0.06 | 1.21 | -69.9 | -97.3 | -118.3 | -138.9 | 8.5 | -95.06 |
| 2.00 | 63.54 | 3349.1 | 3333.2 | 3321.2 | 8.86 | 8.52 | 8.30 | 40.28 | -20.4 | -33.4 | -49.2 | 0.01 | 4.78 | -73.8 | -96.4 | -118.4 | -138.2 | 10.0 | -96.50 |
| 2.50 | 56.27 | 3378.9 | 3364.7 | 3351.5 | 8.92 | 8.47 | 8.30 | 40.35 | -20.8 | -33.7 | -48.7 | 0.10 | 3.50 | -75.7 | -97.3 | -119.1 | -139.2 | 20.8 | -103.70 |
| 3.00 | 52.94 | 3406.4 | 3392.4 | 3380.2 | 8.99 | 8.52 | 8.38 | 40.57 | -19.9 | -33.9 | -48.1 | 0.04 | 2.74 | -69.9 | -95.6 | -117.7 | -137.3 | 35.5 | -109.13 |
| 3.50 | 55.98 | 3434.8 | 3418.6 | 3406.2 | 8.98 | 8.60 | 8.49 | 40.66 | -20.2 | -34.1 | -49.1 | 0.18 | 4.54 | -72.3 | -96.5 | -118.3 | -138.4 | 60.7 | -113.47 |
| 4.00 | 52.98 | 3461.5 | 3446.5 | 3432.9 | 9.01 | 8.59 | 8.49 | 40.70 | -20.7 | -34.9 | -50.0 | 0.28 | 2.93 | -70.7 | -96.8 | -118.1 | -138.6 | 86.7 | -116.81 |
| 4.50 | 50.33 | 3487.1 | 3472.8 | 3459.3 | 9.04 | 8.57 | 8.52 | 40.89 | -20.5 | -34.8 | -48.8 | 0.44 | 2.85 | -69.2 | -96.0 | -118.5 | -138.1 | 100.0 | -118.25 |
| 5.00 | 50.29 | 3513.2 | 3497.7 | 3484.3 | 9.06 | 8.58 | 8.51 | 41.07 | -19.8 | -35.1 | -46.5 | 0.64 | 4.30 | -68.6 | -96.0 | -117.6 | -137.4 | 148.1 | -121.66 |
| 5.50 | 49.83 | 3538.5 | 3522.9 | 3509.0 | 9.12 | 8.62 | 8.56 | 41.17 | -20.7 | -35.3 | -44.8 | 0.92 | 2.77 | -69.8 | -95.6 | -117.6 | -137.8 | 177.0 | -123.51 |
| 6.00 | 50.78 | 3563.7 | 3547.8 | 3533.8 | 9.16 | 8.63 | 8.63 | 41.26 | -20.8 | -36.0 | -44.1 | 1.21 | 2.38 | -70.7 | -95.8 | -116.4 | -136.8 | 211.6 | -124.95 |
| 6.50 | 49.18 | 3588.7 | 3573.1 | 3558.3 | 9.18 | 8.60 | 8.67 | 41.40 | -20.4 | -36.1 | -42.7 | 1.46 | 4.11 | -70.2 | -94.5 | -116.8 | -137.0 | 302.4 | -128.33 |
| 7.00 | 47.12 | 3612.9 | 3597.4 | 3583.1 | 9.21 | 8.60 | 8.65 | 41.61 | -20.2 | -36.5 | -41.9 | 1.70 | 3.19 | -67.7 | -94.6 | -116.2 | -136.4 | 361.5 | -129.32 |
| 7.25 | 47.45 | 3625.4 | 3609.2 | 3595.2 | 9.20 | 8.65 | 8.66 | 41.68 | -20.8 | -36.7 | -41.4 | 1.86 | 1.50 | -66.9 | -94.2 | -116.3 | -136.2 | 507.5 | -132.22 |
| 7.50 | 49.99 | 3638.0 | 3621.0 | 3607.1 | 9.19 | 8.69 | 8.68 | 41.71 | -21.3 | -38.0 | -40.8 | 2.00 | 1.75 | -65.5 | -93.7 | -115.8 | -136.0 | 606.7 | -133.76 |
| 7.75 | 49.94 | 3650.3 | 3633.5 | 3618.9 | 9.18 | 8.70 | 8.72 | 41.71 | -21.9 | -38.0 | -40.7 | 2.21 | 3.22 | -65.2 | -93.3 | -115.5 | -135.6 | 851.6 | -136.87 |
| 8.00 | 49.29 | 3662.5 | 3646.0 | 3631.2 | 9.15 | 8.68 | 8.73 | 41.74 | -21.8 | -39.5 | -40.8 | 2.25 | 3.71 | -66.8 | -93.1 | -115.8 | -135.6 | 1000.0 | -138.27 |

*at 25°C unless mentioned otherwise



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