Coaxial Voltage Controlled Oscillator

ZX95-3050C+

Linear Tuning  2856 to 3050 MHz

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

Applications
• r & d
• lab
• instrumentation
• defense systems
• digital radio

Electrical Specifications

<table>
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<tr>
<th>MODEL NO.</th>
<th>FREQ. (MHz)</th>
<th>POWER OUTPUT (dBm)</th>
<th>PHASE NOISE dBc/Hz SSB at offset frequencies,KHz Typ.</th>
<th>TUNING VOLTAGE RANGE (V)</th>
<th>SENSITIVITY (MHz/V)</th>
<th>PORT CAP (pF)</th>
<th>3 dB MODULATION BANDWIDTH (MHz)</th>
<th>NON HARMONIC SPURIOUS (dBc)</th>
<th>HARMONICS (dBc)</th>
<th>PULLING pk-pk @12 dBr (MHz)</th>
<th>PUSHING (MHz/V)</th>
<th>DC OPERATING POWER Vcc Current (volts) (mA)</th>
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<tbody>
<tr>
<td>ZX95-3050C+</td>
<td>2856 - 3050</td>
<td>+5</td>
<td>-80 - 106 - 127 - 147</td>
<td>0.5 - 20</td>
<td>10-20</td>
<td>40 - 110</td>
<td>-90 - 23 - 13</td>
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Maximum Ratings

Operating Temperature -55°C to 85°C
Storage Temperature -55°C to 100°C
Absolute Max. Supply Voltage (Vcc) 10V
Absolute Max. Tuning Voltage (Vtune) 22V

All specifications 50 ohm system

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

Outline Drawing

Outline Dimensions (inch mm)

A 1.20 0.75 0.46 1.18 0.04
B 0.38 0.38 0.57 0.18 0.33 0.21
C 0.22 0.18 1.00 0.50 0.35 0.16 0.16
D 1.06 0.68 14.48 4.57 8.38 5.33 5.59 5.47 25.40 12.70 8.89 4.57 2.69
E 35.0

Notes:
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+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminals. See Application Note AN-40-10.
## Performance Data & Curves*

### ZX95-3050C+

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<tr>
<th>V TUNE</th>
<th>TUNE SENS (MHz/V)</th>
<th>FREQUENCY (-55°C)</th>
<th>POWER OUTPUT (dBm)</th>
<th>Icc (mA)</th>
<th>HARMONICS (dBC)</th>
<th>FREQ. PUSH (MHz/V)</th>
<th>FREQ. PULL. (MHz)</th>
<th>PHASE NOISE (dBc/Hz) at offsets</th>
<th>FREQ OFFSET (KHz)</th>
<th>PHASE NOISE at 2953 MHz (dBc/Hz)</th>
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*at 25°C unless mentioned otherwise

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