FEATURES:
- Exceptional Phase Noise Performance
- Small Size, Surface Mount
- Lead Free Patented REL-PRO® Technology
- Planar Resonator Construction

SPECIFICATIONS (Rev. C 01/02/12)

Frequency 1280 - 1775 MHz
Tuning Voltage See table below.
Bias Voltage +9 VDC @ 27 mA (Max.)
Output Power +2 dBm (Min.)
Tuning Sensitivity 12 - 42 MHz/V (Typ.)
Output Impedance 50 Ohms (Nom.)
Harmonic Suppression 17 dB (Typ.)
Frequency Pulling 7 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing 5 MHz/V (Typ.)
Tuning Port Capacitance 51 pF (Typ.)
Phase Noise @ 10 kHz -107 dBc/Hz (Typ.)
Operating Temperature Range -40 to +85 °C

Guaranteed Tuning Specifications

<table>
<thead>
<tr>
<th>Tuning Voltage (V)</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>1280 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>1325 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>1400 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>1525 (Min.)</td>
</tr>
<tr>
<td>15</td>
<td>1625 (Min.)</td>
</tr>
<tr>
<td>18</td>
<td>1700 (Min.)</td>
</tr>
<tr>
<td>24</td>
<td>1775</td>
</tr>
</tbody>
</table>

Tolerances on Three Decimal Places ± 0.005

Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temp. Range</td>
<td>-55 to +125 °C</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>+10 V</td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>+28 V</td>
</tr>
<tr>
<td>DC Voltage Applied to RF Out</td>
<td>± 25 V</td>
</tr>
</tbody>
</table>
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCR0128177-9

OPTIMIZED BANDWIDTH

1280 - 1775 MHz

PERFORMANCE PLOTS
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCR0128177-9

OPTIMIZED BANDWIDTH
1280 - 1775 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)
0 2 4 6 8 10 12 14 16 18 20 22 24
Tuning Sensitivity (MHz/V)
0 5 10 15 20 25 30 35 40 45

+25°C  +85°C  -40°C

Control Voltage (Vdc)
0 2 4 6 8 10 12 14 16 18 20 22 24
2nd Harmonic Suppression (dB)
-40 -35 -30 -25 -20 -15 -10 -5 0

+25°C  +85°C  -40°C

This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,693,754; 5,905,431; 6,232,023; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 7,663,174; 7,693,665; 7,812,286; 2,549,761

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