# Wide Bandwidth Frequency Synthesizer

**Built-in Low-G TCXO**

**Model:** N-DCN-SC932-501(IR)-LG

## Parameter | Specification | Remark
--- | --- | ---

### 1. Electrical

#### 1.1 RF Output

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Frequency Range</td>
<td>6300～9300MHz</td>
<td>500KHz Step</td>
</tr>
<tr>
<td>(2) Phase Noise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100Hz offset</td>
<td>≦ −80dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>1KHz offset</td>
<td>≦ −85dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>10KHz offset</td>
<td>≦ −85dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>100KHz offset</td>
<td>≦ −102dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>(3) RF Output Level</td>
<td>≥ −5dBm</td>
<td></td>
</tr>
</tbody>
</table>

#### 1.2 Spurious

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Harmonics</td>
<td>≦ −35dBc</td>
<td>2fo</td>
</tr>
<tr>
<td>(2) Non-Harmonics</td>
<td>≦ −65dBc</td>
<td></td>
</tr>
</tbody>
</table>

#### 1.3 Frequency Stability

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ ±1ppm</td>
<td>−10～+75℃</td>
</tr>
<tr>
<td>≥ ±2ppm(Adjustable Range)</td>
<td></td>
</tr>
</tbody>
</table>

#### 1.4 Alarm Output

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock : TTL-Hi</td>
<td></td>
</tr>
<tr>
<td>Un-lock : TTL-Lo</td>
<td></td>
</tr>
</tbody>
</table>

#### 1.5 Lock-up Time

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 20msec</td>
<td>After Data-In</td>
</tr>
</tbody>
</table>

#### 1.6 Channel Select

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Line Serial Data(CMOS)</td>
<td></td>
</tr>
</tbody>
</table>

#### 1.7 DC

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12V typical, 200mA Max</td>
<td>+10～+14V</td>
</tr>
</tbody>
</table>

### 2. Environmental

#### 1. Operating Temp. Range

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Damage under following Conditions:</td>
<td>Guarantee the performance</td>
</tr>
<tr>
<td>−10～+75℃</td>
<td>Guarantee the operation</td>
</tr>
<tr>
<td>−20～+75℃</td>
<td></td>
</tr>
</tbody>
</table>

#### 2. Vibration

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amp. : 2mm, 10～25 Cycle/Sec, 30 minutes with 3-Axis each</td>
<td></td>
</tr>
</tbody>
</table>

#### 3. Mechanical Shock

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop 3-times from h=10cm on the wooden plate</td>
<td></td>
</tr>
</tbody>
</table>

### 3. Mechanical

#### 1. Size & Weight

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>See attached 150g Max</td>
<td></td>
</tr>
</tbody>
</table>

#### 2. Connector

<table>
<thead>
<tr>
<th>Specification</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Out Control &amp; DC Bias</td>
<td>SOD111xxAR</td>
</tr>
<tr>
<td>SMA (F)</td>
<td></td>
</tr>
<tr>
<td>DF11-14DP-2DS (52)</td>
<td></td>
</tr>
</tbody>
</table>
KS3008
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NEL Frequency Controls Inc.