This specification defines the operating characteristics of an ovenized crystal oscillator. Long term stability is assured through use of premium components.

<table>
<thead>
<tr>
<th>REV.</th>
<th>DESCRIPTION OF REVISION</th>
<th>REQ. BY</th>
<th>DWN. BY</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Updated form, 2.5. was ±5x10^{-10}, 4.3.a. was ±4 mV, 6.1.a. was +2.4 VDC, 6.2.a. was +0.4 VDC</td>
<td>ADB</td>
<td>TST</td>
<td>02-06-92</td>
</tr>
<tr>
<td>B</td>
<td>5.3.a. was &lt; 2.4 Watts (1.8 Watts typical), 5.3.b. was &lt; 4.6 Watts (3.5 Watts typical)</td>
<td>BTB</td>
<td>TST</td>
<td>04-29-94</td>
</tr>
</tbody>
</table>
1. OUTPUT
   1.1. Frequency 10.000 MHz
   1.2. Wave form Sine wave
   1.3. Level 2 Vp-p ±10% into 50 Ω
   1.4. Load 50 Ω ±5%
   1.5. Harmonics < -25 dBC
   1.6. Spurious < -60 dBC

2. STABILITY
   2.1. Ambient < ±5x10^-9 from -30°C to +60°C (referenced to +25°C)
   2.2. Aging
      a. Daily
         i. After 30 days < ±1x10^-9
         ii. After 90 days < ±5x10^-10
      b. Yearly < ±1.5x10^-7
      c. 10 years < ±4x10^-7
   2.3. Voltage < ±5x10^-10/±2% change
   2.4. Short term < 1x10^-10/second root Allan variance
   2.5. Load < ±1x10^-9/±5% change
   2.6. Warm-up @ -30°C referenced to frequency @ 5 hours
      a. 30 minutes < ±5x10^-8
      b. 60 minutes < ±1x10^-8
   2.7. Phase noise
      a. @ 10 Hz < -105 dBC
      b. @ 100 Hz < -125 dBC
      c. @ 1 kHz < -140 dBC

3. ELECTRICAL FREQUENCY ADJUSTMENT
   3.1. Range > ±0.45 PPM
   3.2. Control
      0 VDC to Vref (0 VDC to +8 VDC) or a 10 kΩ potentiometer connected between pins 2 and 4 with wiper connected to pin 3.
   3.3. Slope Positive
   3.4. Center Vref/2 ±10% of Vref (+4 VDC to +0.8 VDC)

(Nominal frequency at time of shipment)
4. REFERENCE VOLTAGE
4.1. Voltage +8 VDC ±5%
4.2. Current < 1 mA
4.3. Stability
   a. Ambient < ±10 mV
      (Over temperature range in 2.1.)
   b. Input voltage < ±1 mV/2%

5. INPUT POWER
5.1. Voltage +13 VDC ±2 VDC
5.2. Current < 800 mA @ turn on
5.3. Steady state
   a. @ +25°C < 2.8 Watts
   b. @ -30°C < 6 Watts

6. OVEN MONITOR
6.1. Oven at temperature
   a. Voltage > +3.5 VDC
6.2. Oven not at temperature
   a. Voltage < +1 VDC

7. ENVIRONMENTAL
7.1. Humidity MIL-STD-202F, Method 103B,
   Test Condition A
   (95% R.H. @ +40°C,
   non-condensing, 240 hours)
7.2. Storage temperature -40°C to +85°C
7.3. Vibration (non-operating) MIL-STD-202F method 201A
   (0.06" Double amplitude,
   10 to 55 Hz)
7.4. Shock (non-operating) MIL-STD-202F method 214
   test condition J
   (30 g’s, 11 ms, Half-sine)

8. MECHANICAL
8.1. Applicable series OCXO 134 series
8.2. Model number OCXO 134-10
8.3. Outline drawing 125-396