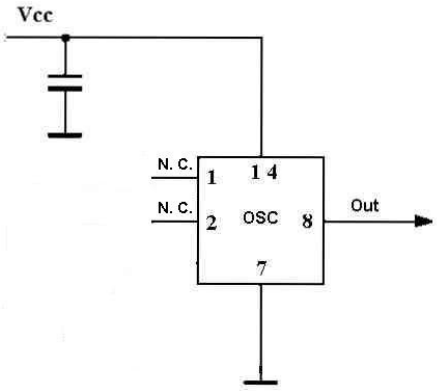
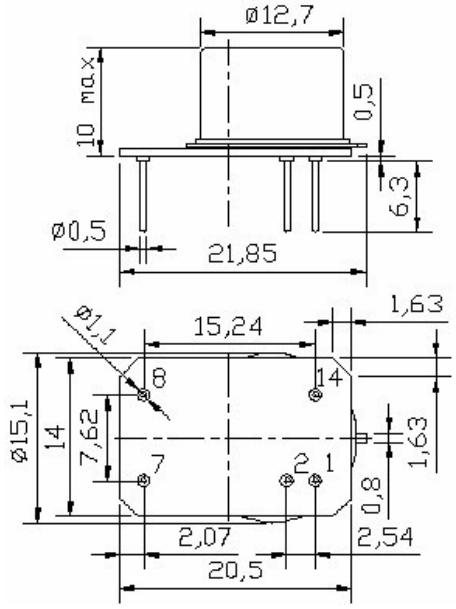
| **RoHS Compliant, DIP14 package.** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Temporary Code : ULN_OCXO-45.158400 | | | | | | | Rev. Preliminary 0.1 | |
| # | Parameter | Symbol | Condition | Value | | | Unit | |
| | | | | Min. | Typ. | Max. | | |
| 1.1 | **Nominal Frequency** | $f_0$ | | | 45.158400 | | MHz | |
| 1.2 | Initial tolerance | $(f- f_0)/f_0$ | at +25°C, $V_c=V_{c0}$ | -0.2 | | 0.2 | ppm | |
| | **RF output** | | | | | | | |
| 2.1 | Wave form | | | | HCMOS | | | |
| 2.2 | High -Voltage | $V_H$ | | 2.4 | | | V | |
| 2.3 | Low - Voltage | $V_L$ | | | | 0.4 | V | |
| | Load | $R_L$<br>$C_L$ | | 10 | | <br>5 | kOhm<br>pF | |
| 2.4 | Duty Cycle | | | 45 | 50 | 55 | % | |
| 2.5 | Sub-harmonics | | | | none | | | |
| | **Power supply** | | | | | | | |
| 3.1 | Voltage | Vcc | | 3.15 | 3.3 | 3.45 | V | |
| 3.2 | Warm-up current | | Vcc=3.3V | 120 | | 190 | mA | |
| 3.3 | Continuous current | | at +25°C, Vcc=3.3V | | | 50 | mA | |
| 3.4 | Warm-up time | $t_{up}$ | to Δf/f=1e-7 at +25°C<br>ref to 1hr frequency | | | 120 | sec. | |
| | **Frequency stability** | | | | | | | |
| 4.1 | vs. temperature | | ref 25°C | | | ±10 | ppm | |
| 4.2 | vs. supply voltage | | ref Vcc typ. | | | ±50 | ppb | |
| 5.1 | **SSB Phase noise** | | 1 Hz | | -75 | -70 | dBc/Hz | |
| | | | 10 Hz | | -110 | -105 | | |
| | | | 100 Hz | | -145 | -140 | | |
| | | | 1 kHz | | -160 | -158 | | |
| | | | 10 kHz | | -165 | -163 | | |
| | | | 100 kHz | | -170 | -168 | | |
| 6.1 | **Bandwidth Jitter** | $J_{BW}$ | 12kHz - 20MHz | | 54 | 68 | fs | |
| 7.1 | **Aging** per day | | after 30 days of operation | | | ±5 | ppb | |
| | per year | | | | | ±0.5 | ppm | |

| **Maximum ratings, environmental, mechanical conditions.** | |
|---|---|
| Power voltage | -0.5 to 4.0 V |
| Operating temperature range | 0°C to +50°C |
| Storage temperature range | -60°C to +90°C |
| Humidity | Non-condensing 95% |
| Soldering Conditions | 260°C 10s |

Schematic connections




Physical dimensions